

RIVISTA MILITARE

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VITTORIO BERNARD

NATO. A politico-military paradox with a rotarian spirit



CARLO DE BENEDETTI

Italy towards the Europe of 1992



SANDRO ROMAGNOLI

The technological and industrial policy of the Army

THE MANAGERIAL STYLE OF RIVISTA MILITARE





VITTORIO BERNARDI
NATO, 30
years of military
alliance, 1949-1979

CARLO DE BENEDETTI
The European
Union of 1992

SANDRO ROMAGNOLI
The technological
and industrial
policy of the
Army

The North Atlantic Treaty signed in Washington on April 4, 1949, is an essentially military alliance and is exclusively defensive. Its basic aim is to avoid war.

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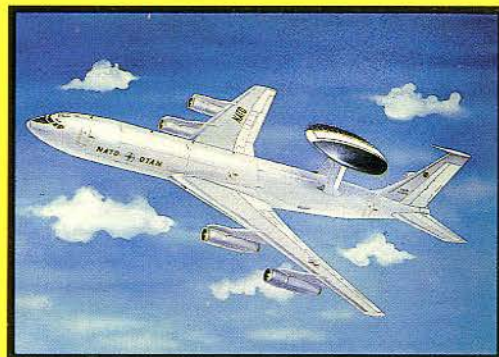


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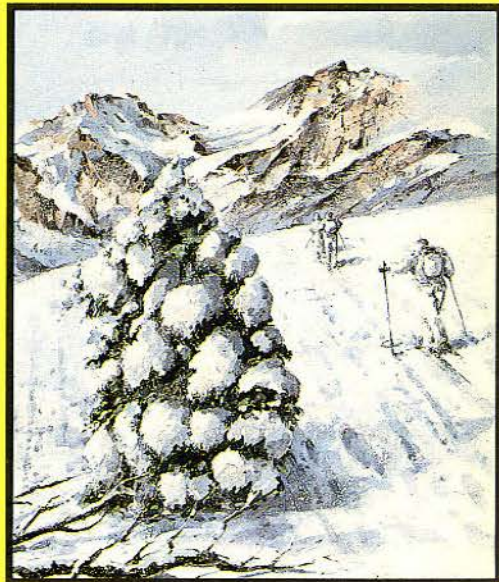
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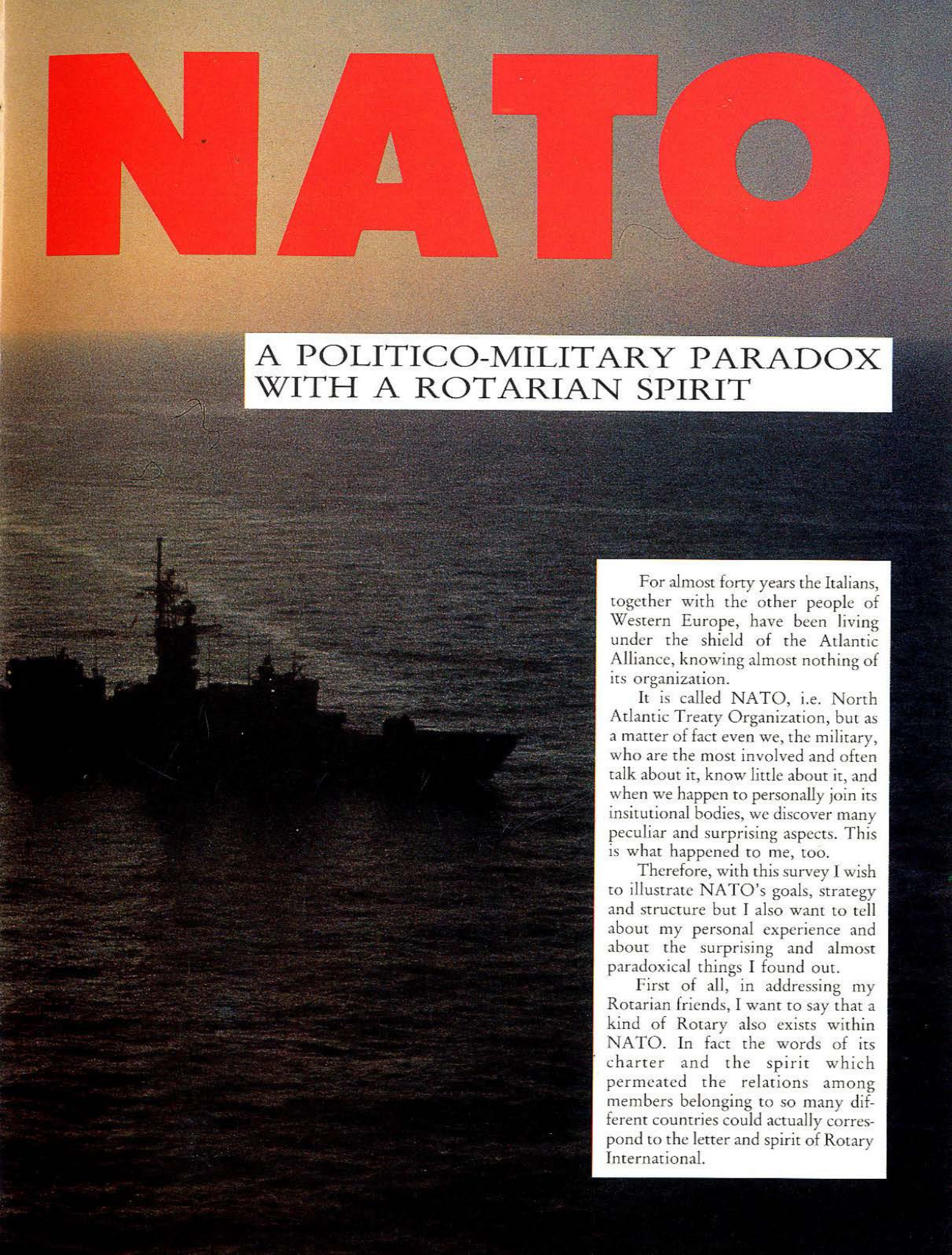
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NATO



A POLITICO-MILITARY PARADOX WITH A ROTARIAN SPIRIT

For almost forty years the Italians, together with the other people of Western Europe, have been living under the shield of the Atlantic Alliance, knowing almost nothing of its organization.

It is called NATO, i.e. North Atlantic Treaty Organization, but as a matter of fact even we, the military, who are the most involved and often talk about it, know little about it, and when we happen to personally join its insitutional bodies, we discover many peculiar and surprising aspects. This is what happened to me, too.

Therefore, with this survey I wish to illustrate NATO's goals, strategy and structure but I also want to tell about my personal experience and about the surprising and almost paradoxical things I found out.

First of all, in addressing my Rotarian friends, I want to say that a kind of Rotary also exists within NATO. In fact the words of its charter and the spirit which permeated the relations among members belonging to so many different countries could actually correspond to the letter and spirit of Rotary International.

Mixed formation of Turkish F-4s, Italian PA-200s and American F-16s operating from the base of Eskisehir, Turkey, during the "DRAGON HAMMER 87" Exercise.

NATO GOALS AND STRATEGY

The North Atlantic Treaty signed in Washington on April 4, 1949, which now counts 16 member Countries (1) was established first of all to stop the Soviet Union's expansionism which after the end of WWII had not demobilized its troops and in the space of a few years had imposed communist regimes in the countries it occupied suppressing all freedom.

To this end it was — and remains — an essentially military alliance, but with a very different character from that of other similar historical precedents. As a matter of fact, this is an exclusively defensive alliance **whose fundamental goal is to avoid war**, any kind of war; if war breaks out because member countries are attacked, **NATO does not propose to win the war but only to make the aggressor stop the attack**, to withdraw from the occupied territory and negotiate.

The novelty vis-à-vis the history of previous military alliances however, is not so much inherent in its defensive and peaceful aims — almost always declared as such even when they were not — as in the fact that NATO a priori **renounces victory**, a renunciation which, I assure you, is not only apparent but very real. This against one of the fundamental and traditional principles of strategy, which says that "attack is the best defence", and contrary to what history teaches us about the inevitability of a conflict between two opposing empires, in which, necessarily, one will have to eliminate the other, and against the Marxist theory about the inevitability of conflict between Capitalism and Communism, ending with the certain victory of the latter.

According to these goals, the strategy of the North Atlantic







In-flight refueling of a PA-200 Tornado of the 36th Wing of Gioia del Colle. Six airplanes of the 36th Wing have been deployed at Eskisehir, Turkey for cross-servicing exercises of the 6th Allied Tactical Air Force during "DRAGON HAMMER 87".

Alliance is based first of all on the principle of **deterrence**, i.e. discourage any possible armed aggression and any threatened use of force by the potential enemy, and, failing deterrence, on "flexible response" with "forward defence".

In order to implement this strategy, the Allied countries have organized a military instrument based on the famous **triad**: **strategic nuclear forces, non-strategic nuclear**

(or theatre) forces and conventional forces, and have formed a politico-military organization — NATO — aimed at developing the relations among member countries, settling situations of international crisis and employing the military instrument in case of war. Within the framework of this strategy and as regards crises, I only wish to mention that NATO, if required, can also avail itself, as deterrence tools, of joint naval formations, which operate in the Mediterranean and in the Atlantic, and of a Multinational Brigade called AMF (L), capable of promptly redeploying in the most threatened areas. As well known, this unit is presently commanded by an Italian officer, Maj Gen. Angioni.

Having only the intention to deter and resist, not to win, NATO has clearly never pursued a force superiority over the enemy, but has only aimed at having sufficient forces both as regards quantity and quality, to leave the enemy no certainty of victory, regardless of a possible inferior global ratio. Such forces, therefore, must ensure the possibility to resist at least as long as it takes to mobilize and fly to the European continent the already existing and potential large reserves available across the Atlantic.

In view of this, the answer, in case of enemy attack, would be "flexible", in that at the beginning it would be calculated according to the character of the attack, initially with the inten-



tion to defend with conventional units only and subsequently proceed to an escalated employment of nuclear weapons if the enemy does not stop the aggression and our defence is unable to resist.

Moreover when one is in a condition of inferiority as regards forces, as is at present the case of NATO as compared with the Warsaw Pact, (Divisions: 1 to 1.7, Tanks: 1 to 2.5, Artillery: 1 to 2.6, Aircraft: 1 to 2), strategy teaches us that the defender should try to offset operationally such unbalance by surrendering space and reiterating resistance in depth on successive positions, in order to weaken the attack without an excessive engagement, gaining time. But this

goes clearly against the principle of "forward defence", which aims at stopping the enemy at the borders, following a choice made by NATO at its establishment to show the Soviets its firm refusal to surrender even a square metre to their expansionism, even if that could cause a new world war.

Thus, compared with the traditional strategy we learned at school and already applied by the Romans, for instance, against the Carthaginians, is another politico-military paradox of the Atlantic Alliance, just like having discarded attack as the best form of defence, paradoxes which the existence of nuclear weapons have made possible and applicable to the European political situation.

But, as the political leadership of the West is apparently ready to give up, together with the double-zero option, the main nuclear tools of deterrence, one is bound to ask whether in the future NATO will still be able to consider itself sufficiently secure with such a self-contradictory strategy, in which the fear aroused in the possible aggressor counts more than the actual willingness and ability to use the tools of terror at the decisive moment.

STRUCTURE AND OPERATION OF NATO

Paradoxes however do not end here.



In addition to the conceptual and strategic ones, there are others of an organizational kind, which are no less evident.

The organizational structure of the Atlantic Alliance is so complicated and detailed that if we were to compare it to the chemical formula of an organic system I think the blackboards of a university lecture-room could not contain it all.

This is because NATO has grown in time, both because the coordination of the military effort has required the joint development of surveys plans and programmes, of weapon systems, of detection, warning and communication systems as well as large infrastructural units, besides the establishment of Multinational Commands at various levels, and because the scope of the Alliance's joint policy has extended well beyond the military area.

The organizational structure consists of a civilian component, headed by the **Atlantic Council**, whose

members are the Ministers of Defence and Foreign Affairs, or their representatives, of member countries, and of a military component headed by the **Military Committee** which joins together the Chiefs of Staff of Defence or their representatives, as well as by a third joint civilian-military component, essentially formed by Agencies.

The whole organization is coordinated by the **Secretary General** and by his International Secretariat.

Under the authority of the Atlantic Council there are several Committees, which deal with many different matters, besides the specific politico-military ones (for examples, there is a Committee that tackles the challenges of modern society, one for information and cultural relations, a scientific committee, a committee for economic affairs, an antipollution committee, etc....) which prepare the work for the council and carry out its instructions. The Military Committee supervises the three Supreme Commands of the Alliance (ACE for

Europe, ACLANT for the Atlantic and ACCHAN for the English Channel) which form the territorial command organization of NATO. The same committee also controls various consultative bodies for study and research, among which the NATO Defence College, located in Rome, where officers who are to be appointed to important NATO posts are trained.

In order to function, the Committees generate sub-committees, working groups, study teams, information centres, etc., many of which are standing and some temporary. All these bodies are made of representatives of the member countries and employ secretarial staff to do the bureaucratic work.

Once inside this organizational structure however the most surprising aspect is not so much its bulk and complexity, but its working system.

In this connection it must be remembered that **NATO is not a supranational organization but an**



Top.

Italian AB-212 and British LYNX helicopters have helped increase the antisubmarine capability of NAVOCFORMED during its 34th activation.

Inset.

Helicopter operations on the Italian Flagship "Vittorio Veneto", during the "DRAGON HAMMER 87" Exercise, carried out by a mixed surface force engaged in maritime control operations.

Right.

Helicopter operations on the USA "Inchon" off Capo Teulada. The amphibious assault ship "Inchon" has taken part with the mixed surface force in the amphibious training activity of the "DRAGON HAMMER 87" Exercise.



association of governments in which the member countries maintain full sovereignty and independence.

Therefore, all choices, decisions, joint directions, as well as the evaluations at the basis of every resolution, are adopted only with the approval



of all members (not by majority) and spring from consultations among nations through their representatives within the various organs, as well as from consultations — and often binding advice — among the organisms themselves.

Therefore, a “no” from a small country weighs as much as a veto from a major one, and can block any proposal.

Obviously a “yes” from the big ones has often a driving psychological effect on the small members.

In short, we could imagine the organization of the Alliance, i.e. NATO, as a “standing, perennial consultation” among member countries on a great variety of problems, also of general interest, in an often long and laborious quest of arrangements, aiming at obtaining a consensus on questions of specific interest involving the security of all.

Even if the need to defend jointly in order to survive is what really counts, it is not so easy because there are considerable economic interests which also revolve around NATO and because often political interests are also different. How an organization of this kind, during the stages of a politico-military war crisis, can manage to control a huge complex of armed forces of different nationalities,



when it could become necessary to take vital decisions within minutes — considering the times of action and reaction of modern offence and defence systems — is difficult to imagine.

Hence, still another of the great NATO paradox emerges. As a matter of fact, at that point some automatisms are foreseen in its warning system, but the decision on the use of nuclear weapons rests, in any case, with the political authorities.

THE "ROTARIAN SPIRIT" OF NATO

Where the organizational structure is wanting, its enlivening spirit makes up for it.

The **spirit** is still one of **solidarity**, born of an essential need for security to counter a common mortal threat, that prompted a number of Western countries to form an alliance a few years after the end of a war which had seen opposing enemies on the battlefield.

That **spirit** has become **friendship**, as was the intention of the countries that signed the treaty, also because it is based on real mutual respect and upholds the noble ideals of liberty for peoples and individuals, of democracy, of justice, to keep a stable peace and promote the development of prosperity through the understanding and cooperation of nations.

In sum, one could say that what Paul Harris and his friends, founders of the Rotary Club, wanted to promote, initially in America, in the relations among citizens, often of different ethnic origins, and among the various categories of citizens, NATO has wanted to accomplish among the states and peoples of the Alliance, and promote in the relations with the other countries and peoples of the world, reaffirming "the faith in the goals and principles of the United Nations Charter, in accordance with the preamble of the Treaty. And this is not just talk, but facts which we, living within the NATO organization, witness every day.



As a matter of fact, it is the sense of friendship among colleagues and the willingness to understand which permit to overcome the first serious difficulty that the newcomer from a non English-speaking country finds at any NATO organization: the working language. Officially there are two languages: English and French; in practice I would say that there are three, or sixteen, i.e. as many as the countries of the Alliance: American English, British English and the English spoken by personnel of the other NATO countries which is

Facing page and above.

The 34th Naval On-Call Force Mediterranean (NAVOCFORMED) in close formation. First is the Turkish Flagship, the destroyer "Savastepe", followed by the US destroyer "Richard E. Byrd", the British frigate "Amazon" and the Italian frigate "Perseo". Activated in Naples on April 22, 1987 during the "DETERRENT FORCE 1/87" Exercise which lasted a month, this force has also carried out an intense support activity of the important NATO live exercises "DRAGON HAMMER 87" and "OPEN GATE". It was the first time that NAVOCFORMED operated with the Allied Standing Naval Force in the Atlantic (STANAVFORLANT) beyond the Straits of Gibraltar.

no less difficult to understand than the other two.

But the unusual thing that happens at NATO — unlike in London or in Washington — is that the British and the Americans do their best to speak slowly, to make themselves understood, and if they happen to know a few words of your mother tongue they say them to encourage you, and smile.

After a while, however, one realizes that the problems under discussion — or to put it better, under consultation — are far more difficult than the linguistic ones, because the points of view are remarkably divergent, just as the respective economic interests of countries that compete on the world market or, as may happen, for conflicting interests of domestic politics and different exposure to the threat.

At first sight, finding a formula which would make, I cannot say, everybody happy but at least acceptable to everybody, seems almost impossible. Then, slowly and laboriously, consultation after consultation — both of the national representatives with the respective governments and, through them, among the governments of member countries — intransigencies disappear, positions come closer, formulations are tempered, until the final statement is drafted and subsequently approved during a session of the Atlantic Council or of the Committee concerned.

Finally one realizes that “the miracle has occurred again”, because the sense of solidarity, born of common defence needs, has prevailed, together with the sense of friendship, which can grant a friend a favour today, with a view to having it returned tomorrow.

In this frame of mind, the representatives of Greece and Turkey too (century-old enemies, still divided by recent contrasts, very strongly felt emotionally) can sit side by side and help reach a solution acceptable to all.

Obviously, decisions often require a long time and boundless patience.

Nevertheless, as a rule, it can be said that up to now the decisions have

Admiral Cesare Majoli, COMNAVSOUTH, reviews the crews of NAVOCFORMED during the activation ceremony at Taranto on April 22, 1987.

been reached in time, because NATO constantly studies how armaments may evolve in the future, and plans well in advance the improvements that will have to be introduced in our defence instruments to face, in the future too the threat represented by the Soviet bloc.

A particularly significant example of the difficult and long process required to reach a consensus can be seen in the decision concerning the “zero option” for the elimination of theatre nuclear missiles in Europe.

Initially the US intention to find an entente with the Soviet Union over this matter was not well accepted by Europeans, who had indeed suggested it when they had decided to deploy the Pershing and Cruise missiles to counter the Soviet SS 20s and improve NATO’s capability of deterrence, considering the unbalance existing in other fields as well as that of conventional and chemical weapons.

Among European countries, the Federal Republic of Germany feeling the most directly threatened seemed to be strongly against the elimination of such weapons, capable of hitting the territory of the Eastern bloc accurately and deeply.

Later, the Bonn Government, after an ample internal debate, freely decided to share the allies’ substantially favourable opinion on this first attempt at a mutual, balanced and verifiable reduction of nuclear weapons, risky though it may be. In order to cut the risks however we shall have to adopt the compensative measures and precautions suggested by the Military Committee and now deemed necessary — though expensive — by all, if we are to reduce the imbalance in the conventional forces and continue to apply the doctrine of flexible response.

In the past however differences regarding nuclear strategy led De Gaulle’s France to withdraw from the integrated military organization of



NATO, albeit remaining a member of the Alliance, but there is no doubt that, in case of need, NATO can rely on the French Armies.

When the split occurred, nobody dreamt of asking the French Government to remain, contrary to what had happened in Czechoslovakia and Hungary — where the USSR, together with other satellite countries, brought with its divisions the “brotherly help” necessary to “convince” the Czech and Magyar population of the convenience of remaining faithful and obedient to Moscow’s word.

This would have been the lot of the people of Western Europe, if NATO had not been established or had been unable to fulfil its mission.

CONCLUSIONS

A historical comparative analysis of the Atlantic Alliance, as a politico-military organization of truly independent and free nations, associated



for a purpose so exclusively defensive as to forsake victory, would deserve an ampler and more accurate discussion than the above, maybe a University dissertation for instance.

Probing deeper, both in the relations with the past and inside the organization, one would probably discover other peculiar and paradoxical aspects, but also elements for more convincing answers to the question I sometimes ask myself: "How does NATO manage to work?"

The proof that it does function and works today is supported by the history of these last forty years of peace on our Old Continent: This is such an unusual fact that it seems almost impossible.

According to me this tells us that NATO may appear as a politico-military paradox in a perspective that refers only to the past, but it is actually not so. I believe in fact that NATO, in its goals, its way of existing and growing, is a multinational politico-military "structure" very much

abreast with the time, not only considering the immense destructive power of nuclear armaments, but also how the people of the world feel today, and the need for freedom of the citizens of the 21th century.

In accordance with the general aspirations to liberty and peace, NATO has up to now been able to solve, in a very effective way, the difficult equation that the history of this century has posed us, appropriately adjusting the power balance with the adversary bloc, without jeopardizing internal liberties and socioeconomic progress.

Now we have the impression that the new Kremlin leader has also understood that it is no decisive solution and it does not pay economically and socially to continue the armaments race in an attempt to overcome the West to the extent necessary to impose his will, winning the war without having to fight.

If the prospects of reduction and better balance of all kinds of ar-

maments between the two blocs are achieved we shall rightly be allowed to say that NATO has attained its final goal: a more stable and more secure peace, with less risks for mankind.

Before reaching this goal, or better still, in order to make quite sure we attain this goal, we must not disarm, neither morally nor materially, because only our determination to defend ourselves at all costs will convince the Soviets to negotiate with good will and serious intentions.

Lt. Gen. Vittorio Bernard
Italian Military Representative
at the NATO Military Committee

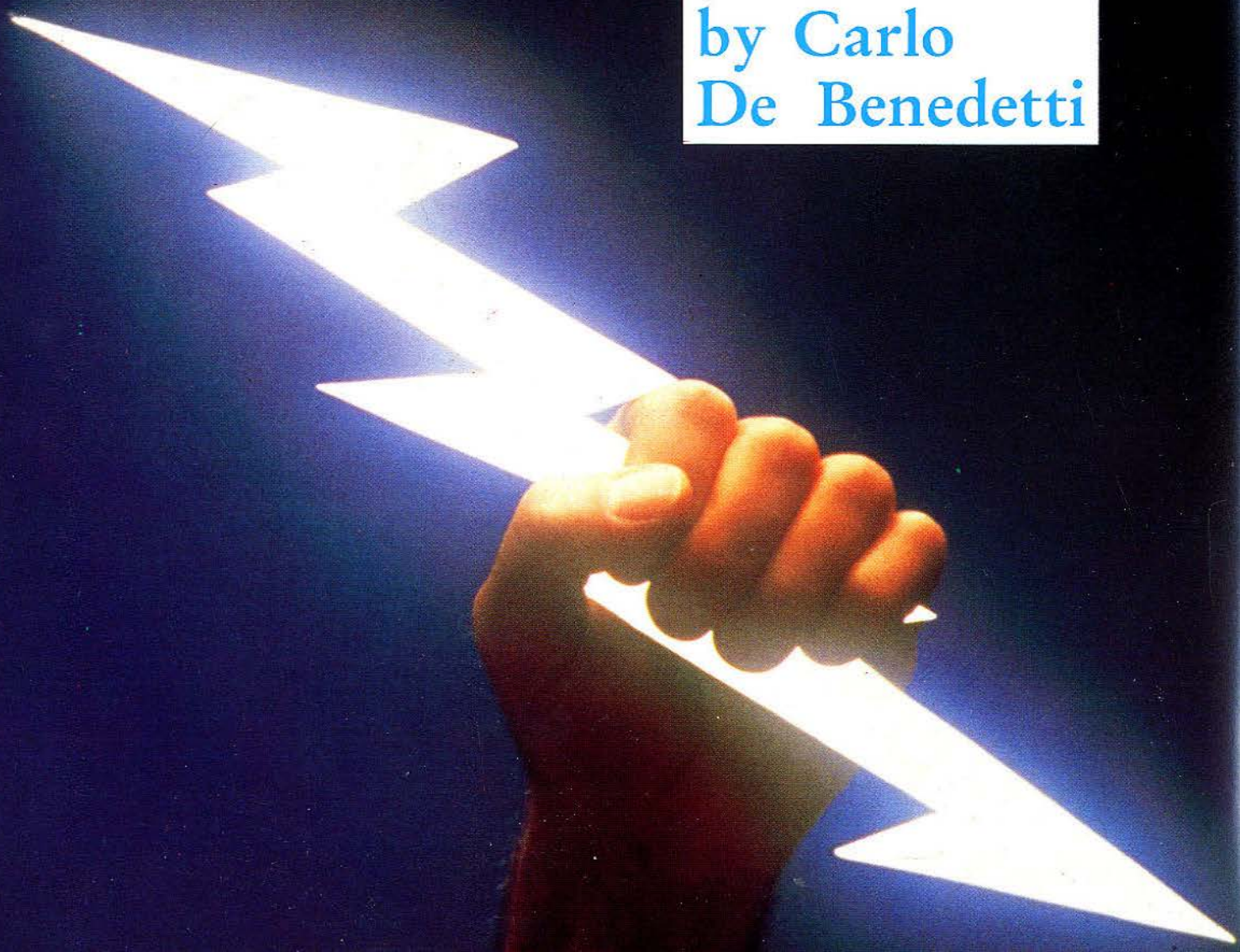
NOTE

(1) Belgium, Canada, Denmark, Federal Republic of Germany, France, Greece, Iceland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Turkey, United Kingdom, United States (France and Spain do not participate in the integrated military structure; Iceland does not have armed forces).

ITALY TOWARDS
THE EUROPE OF

1992

by Carlo
De Benedetti



We have always been accustomed to think of Italy as a country with great contrasts in economy and in society.

Stories of extraordinary success and unexpected recoveries live together and intermingle with incredible delays and inefficiencies. In Italy, more than in other countries, the moments of enthusiasm have a very short life: little is needed for a stage of great development to be transformed into a serious crisis and a total loss of trust and viceversa.

Italy's recent economic history is one of continuous falls and resurrections. It is not surprising that foreign — and not only foreign — investigators always find themselves in great embarrassment when they have to make a point of the situation in Italy. Their reports often alternate between catastrophic predictions on the downfall of the system and an astonished acknowledgement of another miracle.

Nowadays, I think that this schizophrenic situation, in which we find very different behaviours and in which everything is true but so is the opposite of everything has come to its maximum level.

At the moment in which part of Italy is moving in view of the year 2000, organizing itself to make that jump forward required by the new technologies, by the fact that economy has become worldwide, by the development of a post-industrial society based on information, there is another part of the country which wastes and squanders, that loses itself in courtyard quarrels, in rearguard battles to defend corporative, patron-and-client interests and even interests of the mafia type.

It is justified to ask oneself if this mixture of contradictions can continue to stand (in fact the image which very often accompanies the reports written by foreigners on Italian economy and society is that of the leaning tower of Pisa, a challenge against the laws of equilibrium and force of gravity, something which at the same time seems to fall but is also a kind of miracle).

Therefore it is right to ask oneself whether behind the Italian system

there will be a fall more disastrous than the previous ones or maybe a new resurrection.

But it is not up to me to make predictions or give an answer to these questions. As an entrepreneur, I think that above all I have the responsibility of giving a contribution to build the future more than limiting myself to predicting it. For this very reason, I am most of all interested in reflecting on what we seriously have to do so that the 90s will be among the best years possible.

In the last decade the Italy of economy and finance has undergone great changes which go far beyond the cyclical and economic fluctuations. The business system and the productive structure have changed and so has the model of capitalism.

At the end of the 70s, the Italian industrial system seen from the outside was like a big caravan falling to pieces, passive spectator of the international changes, made up of enterprises incapable of producing new richness, but instead destroying it in great quantities, so much so that they had to be sustained by a growing indebtedness or by continuous injections of public money.

Today, the balance structure of the Italian enterprises is unrecognizable compared to that of about ten years ago. The last line of the economic balance sheet — the one giving the result of the business — has changed its sign: no more incredible losses (—2.9 on the turnover of the sample *Mediobanca* in 1977), but profit margins (1.6% in 1986) which sometimes reach levels that can be compared to those of the American rivals.

The recapitalization, carried out inside and outside the stock exchange, has destroyed the indebtedness (the net financial losses of the 1,603 firms

analyzed by *Mediobanca* have passed from 50% of the turnover of ten years ago to about 20% in 1986). The net financial burdens have gone down (from 5.1% of the turnover to 1.3%); self-financing has covered more than 80% of the investments made by the firms compared to the 35-40% of ten years ago.

To obtain these results enterprises have not reduced investments: on the contrary, they have aimed at improving productivity, greatly increasing the intensity of capital in the productive processes. In the industrial sector, the added value per worker has, from 1980 to today, increased by 30% in real terms, i.e. by nearly 4% a year.

Thus, a new positive movement has started: the financial recovery has produced resources for investments, investments have improved productivity, strengthening even more the economic and financial equilibrium.

But it would not be enough to "read" the renewal of the enterprises only through the balance data. The change is a deeper one: it is necessary to "read it" also in the new-found trust in one's own strength, in the capacity of competing on an open market, in the greater flexibility, in the aggressiveness on international markets, which are not only made up of exports but also of the acquisition and alliances with other enterprises.

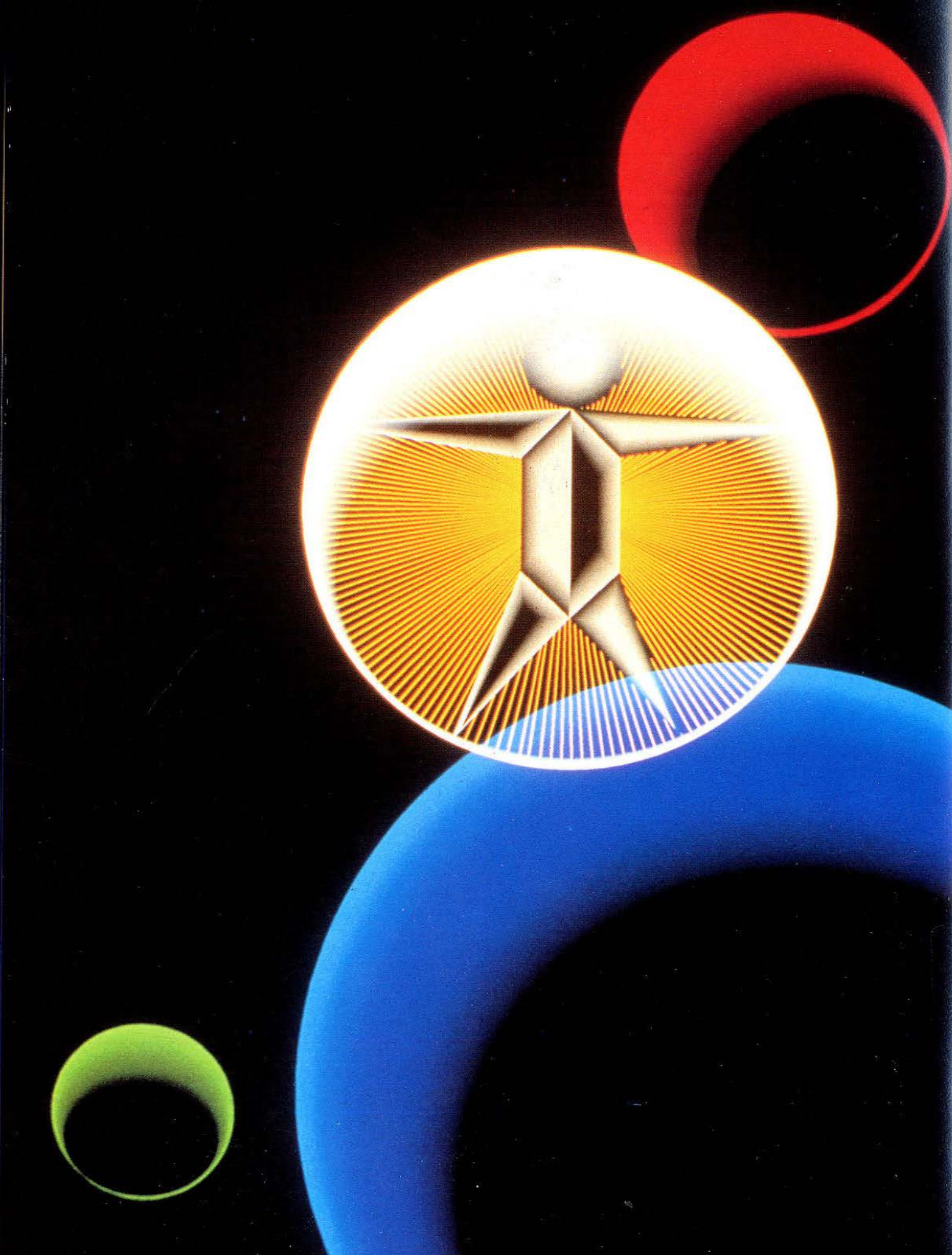
In the last ten years we have set up the bases for a new capitalism in Italy.

It is no longer a capitalism based on public intervention and on a restricted class of entrepreneurs, often belonging to few important families. It is no longer a system based essentially on the defence of the existing activities and productions, to safeguard the interests of a few, opposing itself to the changes which we are experiencing.

Confidence in the market has returned, a confidence in one's own ability to compete in a clear way without subsidies or evasions; there is a new wish to compete in a world which is drastically changing under the trust of innovation and internationalization, but that for this very reason offers great opportunities.

There has been a return to the en-

In Italy, more than in other countries, enthusiasm is short-lived: not much is needed for a stage of great development to turn into one of big crisis and complete lack of confidence, or vice-versa.



entrepreneur system: the wish to grow has stimulated the creation of new enterprises and initiatives, with a new attitude towards the economic risk: there is no longer an escape towards protected niches, but the courage to thrust oneself in the search of new — and even more risky — development opportunities.

At the same time, the economizers have reacquired confidence in the enterprises, giving new vitality to a stock market which before was dominated — not to say plastered — by very few agents.

Italian families have an extraordinary capacity to save: 24.7% of the available private income is saved, a percentage which is astonishing compared to that of other industrialized countries. We save more than the United States (3.9%), Great Britain (10.8%), France (11.3%), and Germany (13.2%). Even the very thrifty Japanese are very distant from our levels (17%).

When a small part of the savings of the families again found the way to the stock market, the close link between saving and enterprises was again created.

The entrepreneur spirit has found the real support of the financial means, helping the growth of a widespread capitalism. To the very few large groups, controlled by a small group of privates or by the State, often acting outside the market's logic.

A growing number of enterprises capable of taking part in a new industrial process of aggregation.

New industrial poles have risen and there has been the birth of a system of enterprises which is more pluralistic, where the great number of agents destroys the positions of revenue and monopoly. Contrary to the past, the new industrial aggregations are more openly subject to the every day judgement and control of the market.

The enthusiasm created by the re-birth of the entrepreneur system, had given rise to the idea — or maybe the illusion — that many other things had changed in Italy.

Political stability, which was rather an idea more than a reality, had anyhow allowed to give life to the

Republic's longest government, making one think that the re-birth of the entrepreneur system had also influenced the world of politics and Italy, an industrial power which had never been taken seriously by its allies and enemies, seemed to slowly reconquer respect and credibility.

Signs of a clear progress also came from some aspects of the economic policy.

The defence of the lira's exchange rate increased the problems of competitiveness for our exports, but stimulated the enterprises to improve productivity and direct themselves towards activities with a higher added value and technological content.

Even more important, is the fact that this policy allowed to break the spiral of devaluation-inflation: the gap between Italy's inflation and the average one of the industrialized countries, which in 1983 was of 10 points, is today reduced to only 1 point.

Very carefully the economic policy made the first steps towards the deregulation and liberalization of the financial markets, favouring a process of internationalization which the enterprise system had already started a long time before with an intensity unknown in the past.

Italy had also made some real progress in what referred to the relationships between public and private.

After years of growing — and inefficient — interference of the State in the economy, time had come to change the trend. Even the public deficit, used to break through all the levels established by the government and defy the laws of economic common sense, seemed to be restrained in its continuous growth if not in its size.

Today, we have the unpleasant feeling that many of the conquests of these last years have vanished.

The political world has again set

There has been a return to the entrepreneur system: the wish to grow has stimulated the creation of new enterprises and initiatives, with a new attitude towards the economic risk.

up the usual rituals, we have gone back to the well-known instability of the governments and to the semi-paralysis of the legislative activity. Facing situations which would require immediate and strong interventions, there is virtually total inability to make decisions.

Half way through the month of March, we still do not have a budget for 1988: a situation which in an enterprise would have already brought about the firing of the managers in charge. Even worse, the indications which we have, show the possibility of a public deficit of nearly 20 thousand billions more than the 103 thousand billions which were the government's first aim.

The sector of public services is usually clearly identified with that part of Italy that is more reluctant to change and that continues with its inefficiencies and delays which are unacceptable in a modern industrialized Country (each one of us can tell stories of never-ending inefficiencies and corruptions in transports, health systems, school and public works). Public services drown in trade-union and autonomous demands, among lack of funds, absence of leadership and different corporative interests.

With incredible resignation, the Country is slowly getting used to second-rate services and to the lack of infrastructures which make the situation worse when compared to that of other European Countries.

But apart from the domestic situation, it is the international economic atmosphere which creates serious problems.

The crisis in the stock markets and the subsequent instability in the exchange rates have brought everyone back to reality. The fall-back of share prices has brought back the saver's former mistrust: it becomes more difficult for enterprises to finance themselves with venture capital. As regards families, who have seen their own financial wealth dwindle there is a diminishing of the trend to consumption.

Above all, the financial crash has demonstrated the fact that it is impossible to create a development cy-



cle by abusing indebtedness, as has been done by United States in recent years.

The recovery of the American economy, which has passed its fifth year of life, is mainly based on the State's deficit and on the families' indebtedness, ending up by determining an enormous deficit in foreign exchanges. Nowadays, the United States finds itself to be a net debtor to foreign countries for an amount of about \$ 450 billion, a figure which is more than twice Brazil's and Mexico's external debts put together.

This debt corresponds to a credit accumulated by other Countries, headed by Japan and Germany.

But these Countries' inability to turn their sudden financial wealth into the development of a real demand, has accelerated the growth of financial investments. The liquidity has not created new production, but has increased certain financial values beyond all limits, until the "bubble" blew up.

Even if the most recent indicators of international economy are quite positive, the unbalance of American accounts is a continuous threat. The United States has to continue to reduce imports and increase exports: for Japan it is a market that is closing, a market which last year received more than a third of Japanese exports; for Europe, apart from being a market which is shutting down, there is a serious threat of a Japanese reflux, subsequent to the redimensioning of the American market.

The ratio debt/credit between the United States and Japan has accelerated in a strong way, the process of integration between the two countries: to the trade and industrial relationships, one must now add the ever closer financial bonds.

Japan is "forced" to invest in America a relevant part of its enormous financial surplus; and America is forced to look for its missing capitals in Japan. Therefore an indissoluble link was created between debtor and creditor which could cause Europe to move out of position.

It is difficult to imagine that the necessary readjustment of the interchanges and financial fluxes between

the great industrialized areas could take place without worsening the rate of development and without particularly affecting European Countries.

With these premises, one could easily conclude that Italy, after the positive recovery of the last few years, is now ready for a new fall.

In industry above all, as always, it is impossible to stand still: either you go forward or backwards; in any case the others will go on moving. What can be done to avoid moving backwards?

I think that once again Italy is faced with a great opportunity: the problem is understanding the meaning and doing some basic things to take advantage of it.

This opportunity is called **Europe**, the completely integrated Europe of 1992, a single market with 322 million consumers.

Let us try to imagine, in terms of population, a market larger than North America and nearly three times that of Japan; a market where the technical standards are leveled out and do not form an obstacle to the movement of goods; where citizens can go from Palermo to Copenhagen without needing passports; where everyone can start a productive activity in any country without the danger of discrimination according to nationality; a market where there are no customs controls and where transport can subsequently be reduced to half the delivery times and transport costs; or even more a market where the VAT is the same everywhere and where the public job orders (which nowadays represent 20% of the economic activity of the EEC) are open in a free competition to all Community enterprises; a market, where each citizen can open a bank account in any Country and where the competition of the bank and financial services is open to everyone.

The creation of this market which the European governments would like to reach by 31 December 1992, can

It is intolerable for a country to have a public debt equal to the wealth it produces annually.

mean a new stage of development for Italy.

In other countries, especially in France and Spain, but also in Germany and Great Britain the date of 1992 has set into motion an intense political debate, accompanied by a careful analysis of the advantages and threats which the 1992 Europe could bring to every sector choosing the measures and counter-measures to be adopted. There is an awareness that the change will be a great one and that economy and society will undergo an important impact.

In Italy I do not see the same awareness, the same attention given to the problem. Italian politics has often considered the EEC an annoying bureaucratic structure, an obstacle to its own game of power.

It is not surprising now that the aim of a full integration in Europe is considered as utopian, also because the 30 years which have passed from the signing of the treaty of Rome have experienced a long series of disappointments and failures. It is too easy to be skeptical on the hundredth European program.

But this time things have changed, because to the utopian ideal of a united Europe it is necessary to add the push which is represented by need and by economic convenience.

Nowadays, the European countries which are in a position of inferiority facing the alliance between North America and Southern Asia, have no other solution: to promote an acceleration of the internal interchanges which will lead to a greater specialization of the enterprises, to improved economies of scale, creating a market which is no longer divided as is the present one.

This need has been clearly understood by the enterprises who, even before the politicians themselves, have moved to the European markets to conquer a European dimension at least.

Nowadays, industries, banks and consumers are trying to force politicians so that the project of a single European market will be carried out in the scheduled time.

This is the real reason for trusting and confiding in the construction of



Europe, despite the political discussions and the national particularism which have been an obstacle to the definition of the Community's budget and handling.

To solve its problems, Italy has to move at the same pace as the rest of Europe.

There is an incredible number of areas in which it is necessary to realign ourselves in terms of production, bodies of legislation, fiscal and monetary policies. But I think that to take advantage of the opportunities of a single market it is at least necessary to do three things:

- create a modern State, in the structures, services and law-making;
- find a solution to the problem of public deficit;
- give a more European dimension to the productive structure.

Creating a modern State means that one has to face the problem of that part of Italy which opposes a real change: the Italy of many bureaucratic structures and in many public services.

It also means creating infrastructures of European dimension to be compared with those which are available to our largest trade partners.

It means creating laws which leave room for the growth of the market and enterprises, but that at the same time offer some assurance abolishing abuse and especially guaranteeing that the rules of the game will be clear and the same for everyone.

Finding a solution to the problem of public deficit requires a great sense of responsibility on behalf of politicians. It is intolerable for a country to have a public debt equal to the wealth it produces annually.

We continue to feed a mechanism which will sooner or later explode: when we buy treasury bills, we think that we have accumulated a bit of wealth. Actually, we are only buying back some of our own debt, because the State's debt is nothing more than the debt of each one of us.

It is not true that public debt can be tackled only with difficult cuts in expenses and unpopular fiscal measures. There are at least three ways that are not too painful to solve public debt: recover the enormous area of

fiscal evasion, increase the very low productivity of public administration, promote a brave program of denationalization which will bring capitals in the State's funds, increasing at the same time private initiative.

Finally, it is necessary to give a European dimension to the enterprises. This is what some of our large entrepreneur groups have been doing for some time, often encountering opposition from abroad and from their own country.

But this process has to be spread to the area of small and medium size enterprises.

In the past some wanted to see Italy's strength in an industrial pattern made up of an incredible amount of small and very flexible enterprises. But nowadays, enterprises are not necessary to conquer Europe. The concept itself of a small and medium enterprise has to be recalibrated. What is small for the Italian market, can become microscopic for the European one.

We have to create the necessary conditions required by the small industry to grow. They are not conditions that can be achieved only by offering a greater availability of financial resources: it is necessary to give the enterprises a better strategic support, a larger contribution to professional formation and to cultural growth and a greater possibility of international contacts to have access to technological innovations.

All this in an environment where the enterprise may be created in full freedom, grow, form alliances and also die; because only a continuous dynamic renewal of an industrial system can maintain a healthy balance.

The times to strengthen the growth of the enterprises' structure in an international way, are very short. In Europe, a process of intense aggregation of the enterprises has already started, favoured both by the fall of share prices and by the market difficulties which force the competitors

to create alliances, fusions and acquisitions.

Italian industry too, has to take part more intensely in this process and not only through its large enterprises.

The whole productive structure has to prepare itself for a new program: the map of European industries is changing, and if the project of the 1992 Europe will be carried out, the competitive challenge of the 90's will be done among new or greatly renewed entrepreneur unions.

In the last few years, Italy has demonstrated that it can legitimately compete for a first place in the European development: and this has been demonstrated above all by its enterprises.

But the drive to a new capitalism and a new entrepreneur system is no longer sufficient. The Europe of enterprises is being created and is made up of concrete actions, productive and commercial structures which integrate themselves and it is an example for the politicians who have often remained blocked by the difficulties of national management, up to a point when they acted in a way which was contrary to that needed to reach European integration.

It is now time for the political class to make a new change of quality and to prove itself capable of regaining the leadership in the process of unification of Europe. In fact, this process, has deep political characteristics because it can renew the culture, society and structure of economy, an economy which in Italy, as in Europe, is facing major difficulties.

It is not possible for Italy to continue to move with the energy produced by only one side of the engine: to the brave renewal of the enterprises there has to follow the less brave one of the public administration and of the institutions.

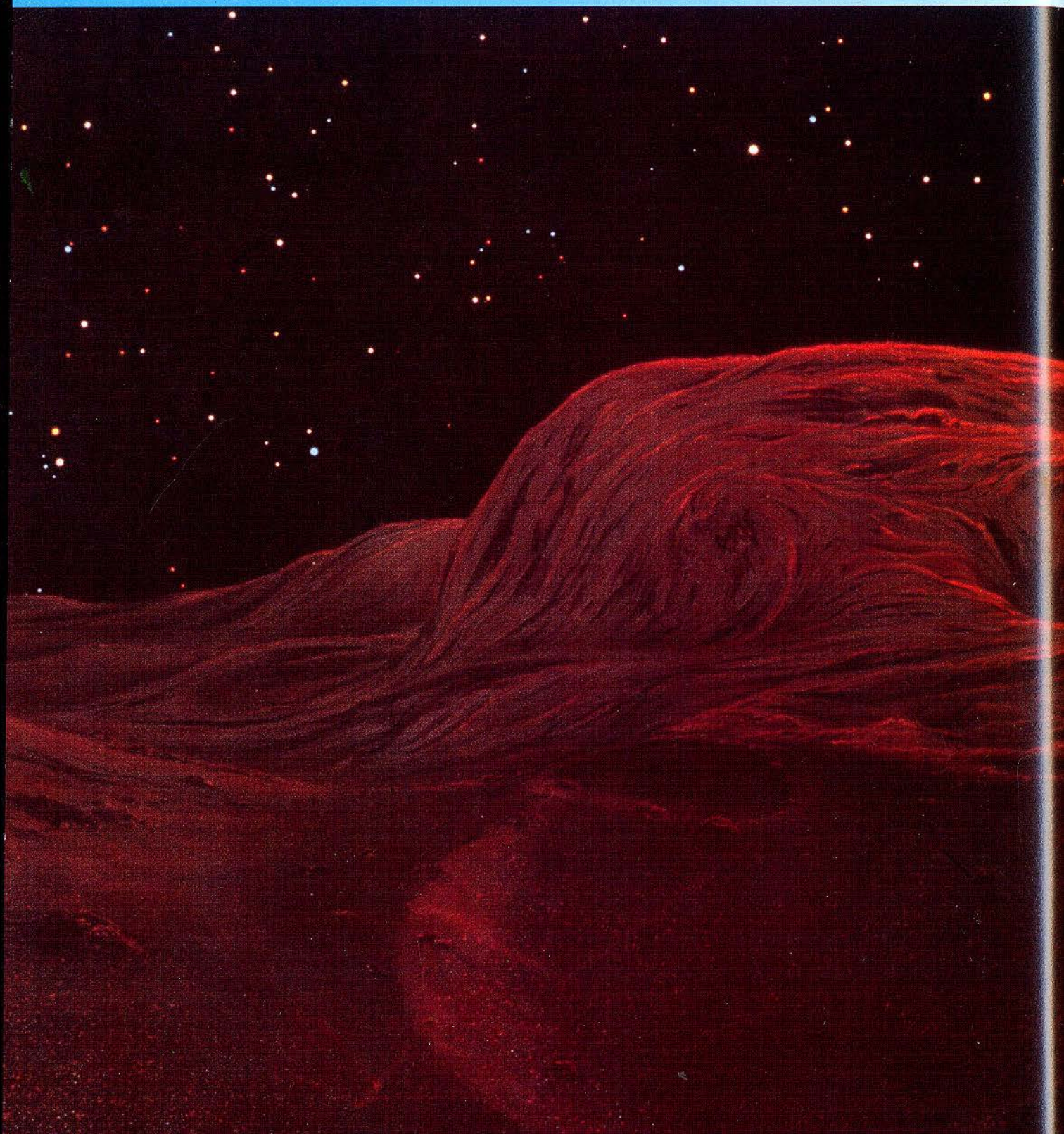
And this is because in an integrated Europe with no boundaries, the handicap of having services which do not work, collapsing organizations and debts which grow at an incredible rate, is no longer tolerable. Not even for an industrial system which in the last few years has been able to astonish everyone for its vitality and entrepreneurial aggressiveness.

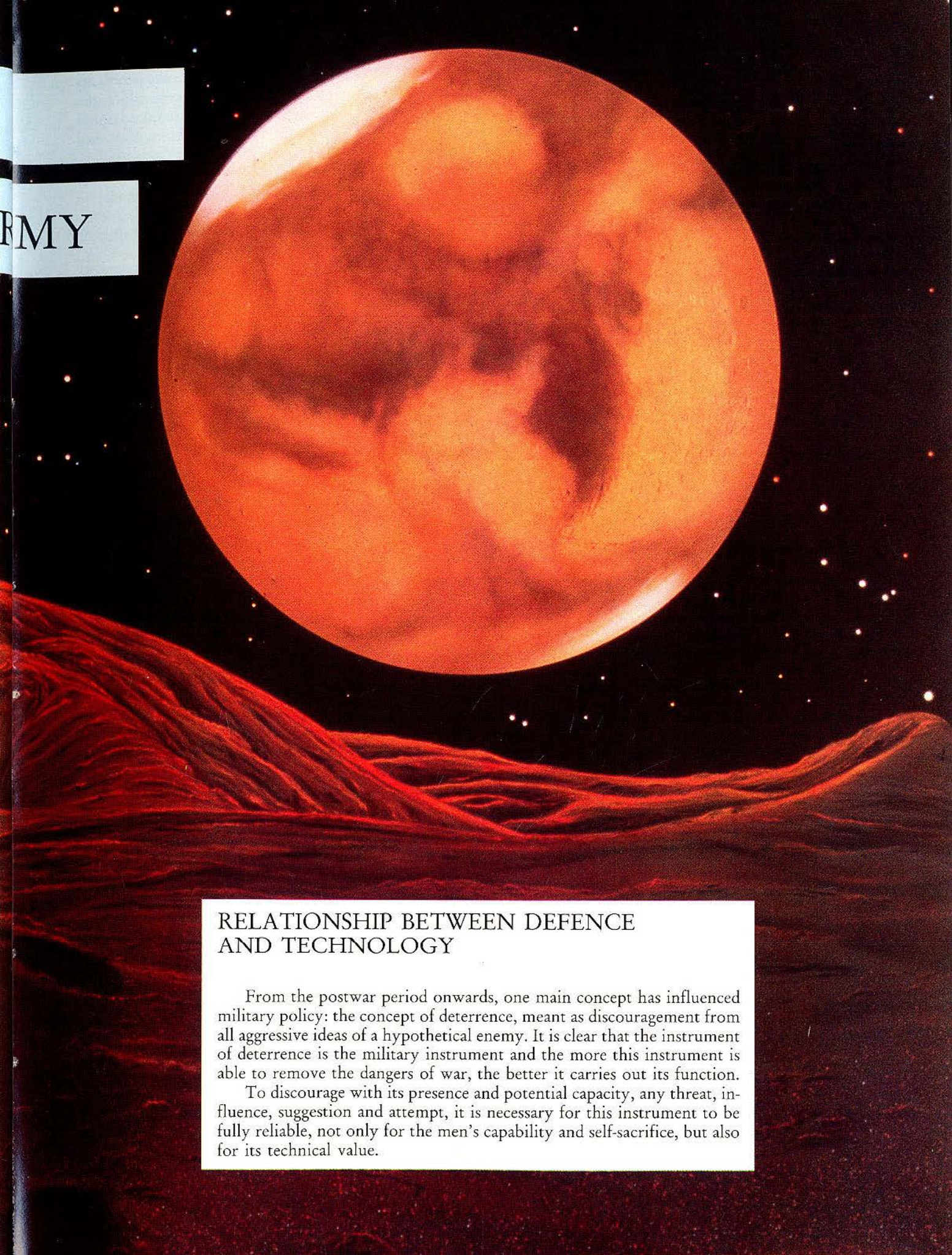
Public services drown in trade union and autonomous demands, lack of funds, absence of leadership and different corporative interests.



THE TECHNOLOGICAL AND

INDUSTRIAL POLICY OF THE A





ARMY

RELATIONSHIP BETWEEN DEFENCE AND TECHNOLOGY

From the postwar period onwards, one main concept has influenced military policy: the concept of deterrence, meant as discouragement from all aggressive ideas of a hypothetical enemy. It is clear that the instrument of deterrence is the military instrument and the more this instrument is able to remove the dangers of war, the better it carries out its function.

To discourage with its presence and potential capacity, any threat, influence, suggestion and attempt, it is necessary for this instrument to be fully reliable, not only for the men's capability and self-sacrifice, but also for its technical value.

SISTEMA D'ARMA MISSILISTICO LEGGERO C/A SKYGUARD ASPIDE



Sistema ogni tempo pluriveicolare a traino meccanico, destinato alla difesa contro bersagli a bassa e bassissima quota

CARATTERISTICHE E PRESTAZIONI PRINCIPALI

- Composizione
 - unità di scoperta, rilevamento e calcolo
 - lanciatori a rampa sestupla
 - veicolo caricatore trasportatore
- Portata radar di scoperta: 20 km
- N. canali di fuoco: 2
- N. missili pronti al lancio: 12
- Tempo reazione sistema: 11 sec
- Portata massima: 10 km
- Portata minima: 750 m
- Quota massima: 3,5 km circa
- Sistema di guida: homing semiattivo
- Peso del missile: 220 kg circa
- Velocità massima del missile: 650 m/sec
- Probabilità di abbattimento singolo missile (SSKP): 80%

Having rightly abandoned the concept of mass as a prerequisite for victory and having landed on the shore of technological advantage, we recognize that there is a **deep interdependence between military requirements and technology**, an interdependence which cannot be ignored.

It is clear that this interdependence can be defined in a different way, and we can talk of **mutual incidence or integration**.

Apart from terminology and expressions, there are two main realities:

- the use of new technologies proposed to the military instrument cannot be denied when technologies themselves influence the relation **effort/effectiveness**, even if sometimes obstacles are interposed by traditions and feelings;

- due to changes consequent to strategic, demographic or financial reasons the answer for the solution of the problems can be given only with the support of technology.

In the report "Defence Requirements and Technology", there is no doubt that the peculiarity of the national strategic problem, the human resources and the socio-political parameters that can influence the structure of the military instrument, together with the available financial resources, are conditioning factors for a defence technology.

Moreover, military planning is based also, and to a large extent, on the long-term prediction of the innovations accounted for armament technology.

In short, **operational planning** of the military instrument and **technological prospects** are so much linked together that it is probably more appropriate to talk of **integration** between Armed Forces and Industry, rather than of **mutual incidence**.

Integration moreover, must not be intended as the expression of a more commercial relationship, but as a **responsible and aware participation**

in the solution of defence problems and therefore with a role which the sectorial industry must take up and develop with determination and responsibility.

It is necessary to realize that there is a **reality of defence**, which can no longer be relegated to the sole and exclusive responsibility of the **military**, but includes a creative and technological world of large and qualified dimensions, if we wish to safeguard the absolute principles of independence and freedom, respecting the principles of the safeguard of human life, which are just as sacred.

If the soldier has inferior weapons, in quality and power, he is more destined to death than to victory. A badly equipped army, requires its members to have a high degree of disregard for life, a quality which is no doubt positive for the Hero who, contemptuous of death, sacrifices himself for his community, but it is certainly negative and humiliating, not to say guilty, if it becomes a rule for Governments, General Staffs and Commanders.

The maintenance of the capability of **deterrence** implies a continuous updating of the military instrument, whose operational efficiency requires an availability of more and more sophisticated equipment and expensive equipment and materials.

Therefore, nowadays there is a philosophy which some call **genetic strategy**, consisting in the availability of war equipment more effective than the one available to the presumable enemy.

Paradoxically, the **shooting war** is replaced, in peacetime, by the **technological war**.

Some say that the technological advantage is characteristically transitory, quickly copied and parried, and therefore it cannot bring about significant changes in the ratios of forces among the various countries.

But the objective difficulty of achieving surprise is balanced by the deterrence caused by the potential capacity of realization and the credibility which can be obtained by the new and continuous development programs.

Finally, one has to consider that the

progressive revaluation of the conventional component involves, in any case, the research and adoption of armaments with evermore improved technology, with the objective of guaranteeing a qualitative superiority to the military instrument, adequate to face an enemy certainly superior in quantitative terms.

What has been said up to now is only a theoretical statement: but it is not so if we refer to the military problem of our country, which in fact consists in guaranteeing an adequate participation in deterrence and in allowing, within the framework of the Western Alliance, freedom of action to the Nation, for the development of a far-reaching foreign policy, autonomously-conceived.

REMARKS ON TECHNOLOGY

I would now like to dwell on some remarks relevant to the technological field.

Nowadays technology allows us to realize armament materials with revolutionary performances and very high operational efficacy.

The effects deriving from the great number of their possible applications influence the operational conceptions themselves, often exceeding them, and also influence organization, logistics and the policy of materials and personnel.

It is true that technological evolution creates a more and more effective ratio man/machine, but one must not underestimate the **negative consequences** that an excess of sophistication in materials can have on the structure and actual capability of the military instrument.

First of all, the **extremely rapid increase of costs**, which, in view of the resources available, drastically reduces the possibilities of acquisition. Moreover, the complexity of the systems, which greatly increases the time for research and development and requires for their maintenance specialized personnel at a very high technical level.

Furthermore, the **quick ob-**

solescence of materials creates the need to renew them frequently, increasing the risk of a perverse phenomenon of "escalation" with serious problems and tensions for the already limited military budgets.

Finally, there is the danger that the project of a weapon, searching for the most advanced sophistication, might end up not realizing, timely, economically and in the most convenient way, the most "gauged" and reliable product for the operational employment.

The requirements of the military instrument and the technological reality, more advanced than the very culture which should govern it, pose remarkably complex problems, the solution of which requires reasoned and coherent choices, following strict criteria of cost/effectiveness.

In this framework, evaluation mistakes, decisional uncertainties and changes of mind do not just influence only the operational effectiveness of the service but also the national armament industry. Therefore, an effective

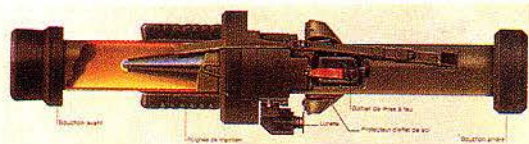
policy of materials cannot be separated from a planning with the following requirements:

- **certainty of financing**, in relation to the industrial times;
- **continuity**, to avoid generation jumps in production which would determine irreversible gaps;
- **timeliness** in the definition of the needs, to avoid situations in which industry could respond too late to the national requirements or enter international cooperations in an untimely manner.

ARMY/ TECHNOLOGICAL INDUSTRIAL WORLD: PRESENT MUTUAL POSITION

Let us now move on to the description of the present position of the Army vis-à-vis the technological and industrial activities.

LANCIARAZZI C/C "APILAS"



Sistema d'arma c/c, a corta gittata, del tipo "usa e getta"

CARATTERISTICHE E PRESTAZIONI PRINCIPALI

- Peso dell'arma completa: 9 kg
- Lunghezza (pronto al tiro): 1,26 m
- Calibro: 112 mm
- Gittata utile: 25-400 m
- Potere perforante su bersaglio di acciaio omogeneo a 90°: 670 mm

MIRACH 20



Aereo pilotato a distanza di piccole dimensioni, per la sorveglianza del campo di battaglia, l'acquisizione obiettivi ed il controllo del tiro

CARATTERISTICHE E PRESTAZIONI PRINCIPALI

- Portata: 40-50 km dalla stazione a terra con un'autonomia di circa 2 ore
- Sensori a bordo: di tipo diverso secondo la missione da svolgere e comandati dalla stazione a terra
- Precisione di rilevamento degli obiettivi: inferiore ai 100 m
- Peso del vettore: 150 kg
- Trasmissione a terra delle immagini: in tempo reale, anche in condizioni di foschia, nebbia leggera e di notte
- Recupero del veicolo: entro un raggio di 150 m dal punto di arrivo previsto
- Velocità di navigazione: circa 150 km/h
- Possibilità di voli: interamente guidati da terra, programmati o guidati e programmati

From the Service's perspective, it is possible to see three precise moments in the process leading to the realization of a defence product:

- research and development;
- experimentation and technical-operational evaluation;
- production and prevision.

Research is the vital effort which has the purpose of maintaining the military instrument up-to-date and credible, and has a hauling effect on national industry.

The continuous technological and scientific progress requires ever greater financial efforts for Research and Development, so much so that the incidence of its cost on major weapon systems, which was about 10% in the '60s, now reaches 20-25% and will go up to 30% in the '90s. It is obvious that the Army cannot give up such effort as it is also obvious that Research and Development cannot be limited to the national field.

Undertaking purely national programs would be a losing strategic economy as regards cost, because the Service cannot employ all its resources on one program; only on the economic plane, because the national market is limited and to enter the international market with a national-only project is out of the question; finally on the technical feasibility level, since the modern weapon systems, mainly because of their high sophistication, require very advanced technologies which are not all present in a single nation. Therefore, it follows that the Army proposes a policy of participation involving the sectorial industry, often forcing it to find new organizational formulas, such as Consortia, essential to carry out the given tasks, whether national or international, at best.

The activity of experimentation and technical-operational evaluation, is presently under the control of

Bodies, Plants and Technical Centres, which are part of the Technical-Industrial area of Defence.

They are Bodies carrying out a very demanding activity, from the technical point of view, given the complexity and sophistication of the materials, and they carry out their work — it must be said — to the limit of their possibilities.

Therefore this is an activity which is carried out autonomously, aimed at the exclusive needs of the Service, in a context of limitations and difficulties which should be abolished with the realization of different structures which I will mention further on.

Finally, as for **production and provision**, it is to be excluded that the military plants can carry out functions of production of great quantities, due to the lack of major production lines and of a class of technical experts.

The plants will continue to have the main function of testing the supplied material and taking part in the major overhand of materials.

In summary, the Army cannot express, through its installations, its productive capability in terms of quantity.

At the moment, only a limited activity of research and development is carried out through the Army plants; they are used for testing and controlling requirements; they solve administrative problems and contribute to the general overhaul of the weapon system.

It is a complementary component, of a very low percentage (not more than 10%), of an instrument which, in any case, has to turn for more than 90% to the productive capacity of private industries.

RELATIONSHIP DEFENCE/DEFENCE INDUSTRY

Let us see now the relation **Defence/Defence Industry**, as it is and as the Army would like it to be, moving from the present reality, reflecting on the tasks that can be assigned and considering the proposing policy exercised in the sector.

As an introduction, I shall give some simple and obvious clarifications, to avoid the need for backing up arguments:

- the armament industry is a fundamental component of national defence.

Therefore it represents a determining factor of the capability, credibility and defensive autonomy of the nation;

- the defence industry is an organic and central part of the national industry, which cannot be separated from it.

The fact that the Defence can count on national productive resources makes it possible to **harmonize** the growth of the military organization with the nation's economic development, giving it substantial financial resources.

As a consequence, the funds allocated for defence reenter the nation's economic circuit.

Moreover, the essential national supplies represent a safety factor as regards the continuity of supplies.

Having cleared the field from these initial concepts let us say, though, that the armaments industry in Italy includes a group of very heterogeneous firms, mainly **medium size**, specialized only in military production; sectors dedicated to military production in **large firms**; a high number of **minor firms**, also at artisan level, not always concerned with military production only.

This structure of the Italian armament industry is therefore characterized by:

- **extreme fragmentation** of the industrial base, also at system level;
- **scarce specialization** with particular reference to components;
- **technological dependence from abroad** for the production of valuable components;
- **strong inclination towards the export market** and consequent increase of the productive capacities out of proportion to the national needs.

Therefore the industrial activity is characterized by distortions and duplications in certain areas, and by insufficient initiatives in others.

There are sectors in which the **defence industry** should, moreover,

SISTEMA CONTROAEREI LEGGERO SEMOVENTE SU SCAFO M113, QUADRINATO DA 25 mm



Sistema d'arma contraerei leggero destinato all'autodifesa delle Unità meccanizzate e corazzate

CARATTERISTICHE E PRESTAZIONI PRINCIPALI

- Sistema di puntamento: optoelettronico con calcolatore digitale
- Distanza max di tiro: 2500 m
- Celerità di tiro: 2400 colpi/min
- Tempo di scansione: 6 sec
- Velocità iniziale: 1463 m/sec
- Dotazione di bordo: 640 colpi
- Capacità IFF

express itself in a more complete and exhaustive manner.

In the research and development sector, due to the burdens implied by basic research, the activity should be carried out by industry and by Institutional Research Centres, with the help of the State, with long-term financial programs and in a coordinated context of national and international cooperation.

In the present technological framework, the experimenting and evaluation activity should be carried out by qualified and specialized interdisciplinary institutions, supported by sizable structures, means and bodies which exceed the capabilities, potentiality, available resources and indeed the very tasks of Defence.

Therefore, Defence should not satisfy every need but limit itself to the determination of certain industrial trends, giving indications on the

research and development programs aimed at satisfying its operational needs, fixing limits and priorities.

Only later should the Defence have a preeminent role in the experimentation and technical-operational evaluation of prototypes, with the burdens that this activity implies in terms of infrastructure, equipment and personnel.

In recent times, however, in the industrial field there has been a timid process of reorganization and rationalization, stimulated by the need for a renewal and modernization process started by the Armed Forces in the mid '70s.

In the analysis of the relationship **Defence/Defence Industry**, we realize that this relation cannot be reduced to simple ratios between demand and supply: we understand that the programming and the development of the armaments industry must

ARMA DI REPARTO CAL. 5.56



Arma di reparto cal. 5,56 mm x NATO, avente molte parti in comune con l'arma individuale

CARATTERISTICHE E PRESTAZIONI PRINCIPALI

- Lunghezza: 1 m
- Peso: 5,340 Kg
- Caricatore: 30 colpi
- Cadenza di tiro: 800 c/mi

maintenance of the equipment, as well as for the directing and spurring action which Defence must carry out vis-à-vis the armaments industry.

And now the conclusions.

The task of the Army is that of carrying out **deterrence** in concurrence with the other energies of the country.

Deterrence needs a technology that only an organized Defence Industry can guarantee.

The Defence Industry is an essential component of the deterrent instrument and cannot turn down the commitment to which it is called by the Government and by the Minister of Defence in particular, a commitment which is shared by the major leaders of the national industry, who said: "The Industries now selling arms to the Third World will be able to work for a different customer, **Europe**."

Sandro Romagnoli

be integrated with that of Defence.

In fact, Defence is both a **customer** and a **supporter**, because it creates the conditions for the existence of an industrial base able to satisfy the national defensive needs. It is an **entrepreneur**, since it feeds an industrial strategy for defence, proposing its participation in an adequate market at international level.

The simple and spontaneous role of **customer** is aimed at the acquisition of equipment and materials, while that of **backer** presents itself in various forms:

- **incentives**: through the policy of orders, technological innovation and support in the development stage;

- **direct acquisition of equipment and materials**, also accepting higher costs of development and production with the prospect of logistical and technical-operational advantages, besides, of course, the advantages of a socioeconomic and industrial nature, including the opportunities for employment;

- **introduction of a compensation system**, intended to guarantee that a country exporting military products to Italy will import from our country a value corresponding to its exports;

- **introduction of the national industry in the great European and World industry**, through international cooperation agreements, as an essential condition and prerequisite for the acquisition of the technological and industrial capability to compete in the world market;

- **homologation of products** to facilitate their access to the international military market;

- **execution of practical tests** for prototypes of weapons, vehicles, equipment and other devices in experimental centres and ranges;

- **promotion** towards possible customers;

- **extension of the potential markets** through intergovernment agreements on standardization and interoperability.

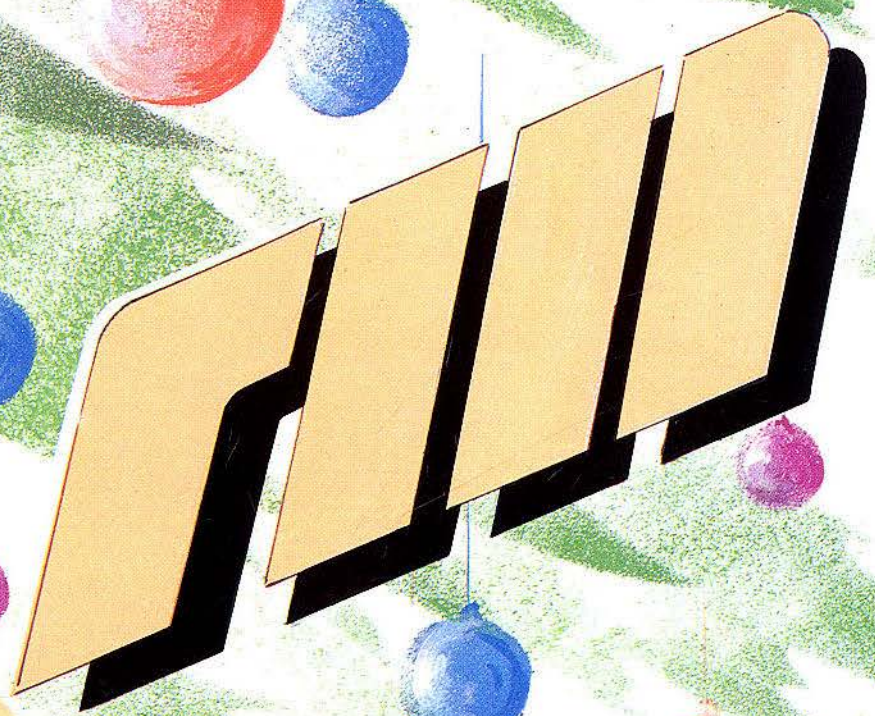
In short, national development and production, supplies and exports, coproductions, productions under licence or foreign acquisitions are part of an **organic program** which is the core of the industrial strategy of the defence system, made up by the Armed Forces and Industry.

Therefore between Defence and Industry there must be a permanent and organic consultation, especially for research and development, provisions,

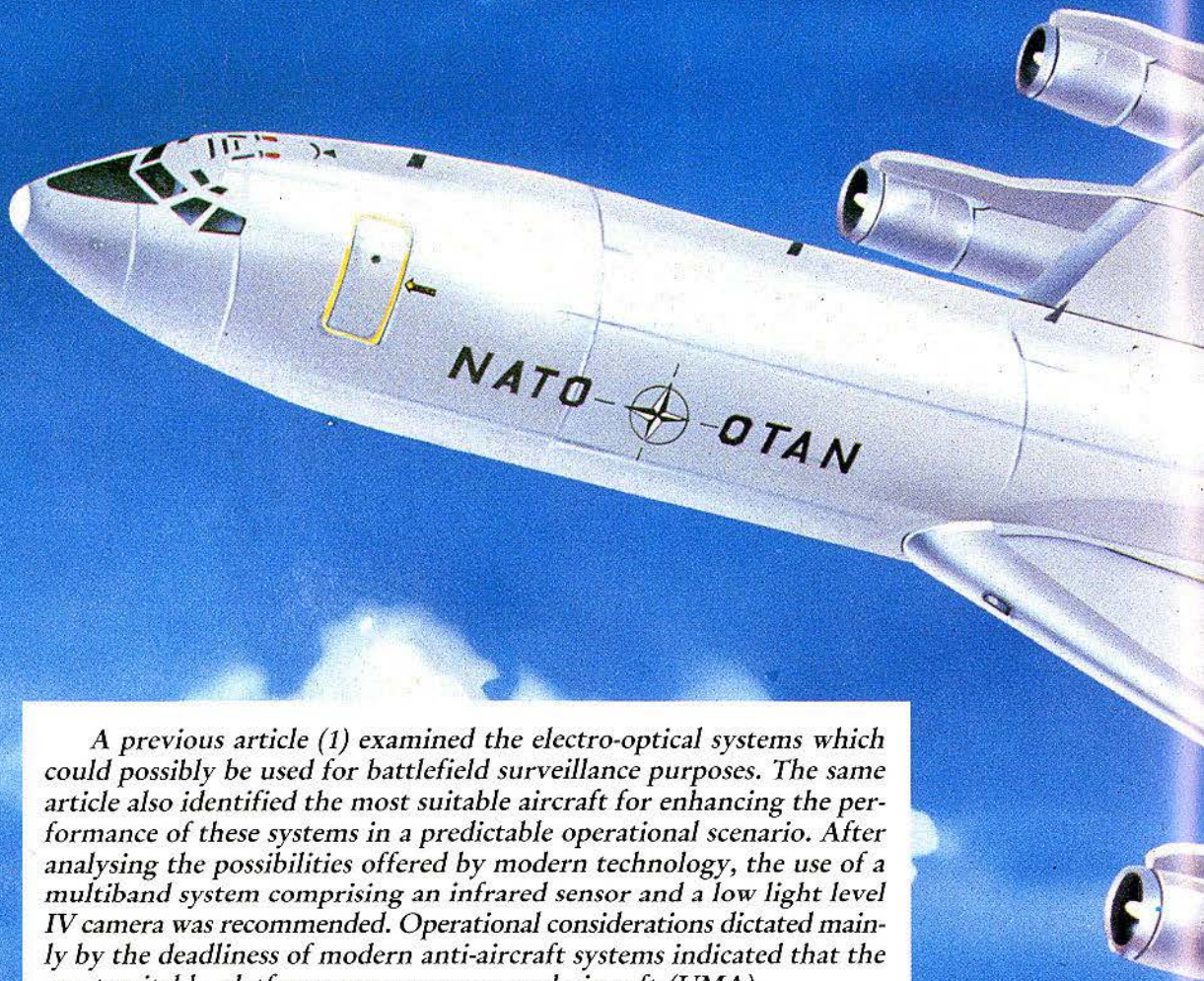


Lieutenant General Sandro Romagnoli has been Commander of minor Bersaglieri units at the "Ariete" Armoured Division, Observer Officer with the Air Force, Commanding officer of the 3rd Bersaglieri Battalion, Section Chief at the D Division of SID. He commanded the 8th Bersaglieri Regiment of the "Centaurio" Armoured Division and the 8th "Garibaldi" Brigade of the "Ariete" Armoured Division. He was Deputy Chief of Staff of the Southern Military Region, Chief of Staff of the 5th Corps and Deputy Commander of the Southern Military Region. At present, Lt. Gen. Romagnoli is Head of the General Directorate for Ground Armaments and Ammunition (Terrarmimuni).

HAPPY NEW YEAR
1989



AIRBORNE RADAR SYSTEMS



A previous article (1) examined the electro-optical systems which could possibly be used for battlefield surveillance purposes. The same article also identified the most suitable aircraft for enhancing the performance of these systems in a predictable operational scenario. After analysing the possibilities offered by modern technology, the use of a multiband system comprising an infrared sensor and a low light level IV camera was recommended. Operational considerations dictated mainly by the deadliness of modern anti-aircraft systems indicated that the most suitable platform was an unmanned aircraft (UMA).

Attention is now focused on radar systems, which also work by electromagnetic radiation, although at much greater wavelengths. The drawback of radar systems is that they function actively, i.e. their principle of functioning is based on the emission of electromagnetic energy which can easily be detected by the enemy's electronic listening devices.

FOR BATTLEFIELD SURVEILLANCE





Starting of Drone.

Compared with electro-optical systems, they are heavier, appreciably more expensive and, in their conventional form, produce lower quality images that are more difficult to interpret. On the other hand, radar offers, considerable advantages in terms of range and can operate also in bad weather conditions. It is a fact that low intensity Tv systems cannot penetrate fog or smoke and that the effectiveness of infrared sensors is severely curtailed by the presence of high concentrations of water vapour in the atmosphere.

Radar's potential as a recognition and surveillance system was realized as early as World War II. However, the technology of the time did not allow equipment to be constructed with the capacity to identify tactical land targets. The airborne radar systems available at the time were used in an air-ground role and would only allow the identification of naval targets or the recognition of ground features characterized by abrupt changes in reflectivity, such as coastlines and large rivers. Only recently has it become possible to build on-board radar systems capable of providing high quality images, comparable to those of the conventional

aerial photography reconnaissance. This was made possible by R & D programmes leading to the consolidation of techniques such as pulse compression and synthetic aperture. The article also analyses the problem of resolution, which is fundamental to the identification and recognition of tactical targets, and also discusses the main radar techniques used to solve it. Finally, prospects of development and present trends are also discussed, and several current programmes are examined briefly.

THE PROBLEM OF RESOLUTION

The long-range detection of small objects, which is what all tactical targets can be considered to be (e.g. ordinary and armoured vehicles, artillery pieces), and the detailed mapping of ground requires a radar with good azimuthal and range resolution. In other words, the system must be capable of separating the radar echoes reflected by two objects lying close together. The distinction between azimuthal and range resolution is dependent on the fact that radar works by conveying energy in the form of pulses inside a comparative-

ly narrow angular sector, known as the radiation beam.

The transmission of pulses makes it fairly easy to measure an object's distance, while the concentration of energy into a narrow beam allows the angle to be measured. Range resolution is dependent on the capacity of the system to detect and display separately the echoes reflected by two objects lying close together and characterized by the same angular bearing. This capacity is mainly dependent on the duration of the pulses transmitted: two targets with the same angular bearing can be distinguished only if they are separated by a distance exceeding the space corresponding to half the duration of one pulse. For example, 1 microsecond pulses give a range resolution of 150 metres.

Azimuthal or angular resolution is defined as the capacity to detect and display as separate targets two objects lying the same distance away. The parameter used to determine the angular resolution of a radar system is the width of the radiation beam, usually measured in radians. Since the arc of the circumference subtending the same angle at the centre increases with the radius, the azimuthal resolution, measured on the ground, decreases with increasing distance. An aerial with a radiation beam of 1° allows two objects located 5 nautical miles away to be represented as two distinct objects only if they are at least 175 metres apart.

In measuring both the range and the azimuthal resolution, consideration must be given also to the characteristics of the system used for displaying the image. The cathode rays tubes used for this purpose must have adequate diameter and definition in order to ensure that there is no loss in sensor performance.

The product of the range and azimuthal resolutions gives us the so-called resolution cell of the system. The latter may be defined as the area occupied on the display screen by the echo of a point-shaped target. Since

the azimuthal resolution is hardly ever as good as that of range the cell has a rectangular shape, so that one often speaks also of rectangle of resolution.

Since resolution determines the quantity of data that it is possible to extract from a radar image, mission requirements must be taken into account when it is being set. In doing so, also the nature and size of the targets must be taken into account, and it is necessary to decide whether it is sufficient to detect their presence or to proceed to recognize and even identify them, in accordance with the meanings given in Tab. 1.

The detection and display on a monitor of an object located inside a resolution cell is dependent on the relative intensity of the echo generated. The case of two ideal adjoining cells, one of which containing an undefined natural object having a different reflectivity than the ground, is given in 1a. As far as the return signal is concerned, the difference between the two cells is comparatively small and would be hard to pick up on a radar screen. The situation is improved considerably by using smaller resolution cells, as shown in Fig. 1b. The object now occupies practically a whole cell and the different strength of the radar echo stands out by comparison with the adjacent cells. A further increase in the resolution of the system by which the object of interest was allowed to occupy two or more adjacent cells would not only increase the likelihood of an operator or an automatic device detecting the target immediately, but would also allow it to be identified.

The performance requirements of a radar system suitable for detecting different target types are given in Tab. 2. From the same table it can be seen that, in order to build up a radar image of the target that is detailed enough to allow it to be recognized, the resolution requirements are even more critical, dropping to values between 1/5 and 1/20 of the object's largest dimension.

One factor that must not be overlooked when calculating the resolution of a radar system is the constructional complexity of the device itself. It can generally be assumed that,

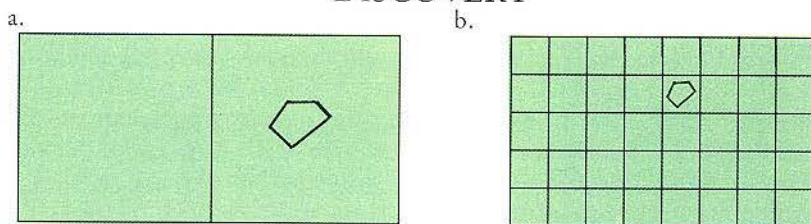
Tab. 1

INFORMATION LEVELS EXTRACTABLE FROM AN IMAGE

Target discovery	Presence of an unidentified object in the image
Target classification	Definition of the class to which the object belongs: tank, truck, helicopter, aircraft, etc.
Target identification	Identification of the type of target: T-72, M-60, MI-24, AH-64, etc.

Fig. 1

EFFECT OF RESOLUTION CELL SIZE ON TARGET DISCOVERY



a. The presence of an object in one of the two resolution cells is hard to detect since the difference in terms of the return signal is negligible.

b. Once the dimensions of the resolution cells are diminished the object occupies them almost entirely and becomes easily visible when compared to adjacent cells.

Tab. 2

RESOLUTION REQUIREMENTS FOR AIRBORNE RADAR SYSTEMS FOR THE PURPOSE OF DISCOVERING AND RECOGNIZING DIFFERENT TYPES OF TARGET

Target type	Discovery (m)	Recognition (m)
Ship	100	10
Transport Aircraft	30	3
Vehicle	5	1

once the size of the area to be explored has been decided on, the number of calculation operations required is directly proportional to the number of resolution cells contained in a single image. Costs increase at the same rate, which is another factor that should not be underestimated, and so does the time needed to interpret the images produced by the system. Therefore, in any tactical application, the process

of analysing and extracting information must take place in real time. This is not true in the case of strategic systems, in which the time available can run to days and even weeks. A happy compromise between degree of image detail and speed of analysis can be found by reducing the area explored, and thus the size of the radar map, without affecting the system's resolution.



Radar panels on the 3-3 AWACS

PULSE COMPRESSION

The range resolution of a radar is directly proportional to the duration of the pulse transmitted. The use of ultra-short pulses, although apparently the simplest solution to the problem, is unfortunately not without drawbacks.

At constant peak power, if the pulse duration is reduced also the energy transmitted is reduced, and there is a consequent shortening of the range. On the other hand, it is not possible to raise the peak power above a given value, which is set by the characteristics of the system and, in particular, by the transmitter-wave guide complex. A reduction in pulse duration entails also broadening the frequency band used by the system. This raises difficult problems, particularly as far as antenna and radio frequency component design and construction are concerned. The maximum frequency band width in a modern radar system must lie between 3% and 10% of the operating frequency. A band width of 200 MHz, would be unlikely to be found in a system operating at a frequency of 10 GHz as it represents only 2% of the latter, while it would be virtually impossible to achieve in a system operating at a frequency of 1 GHz, of which it would represent 20%.

The problem of range resolution can be solved only by means of special pulse compression techniques. These

would make available all the advantages of ultra-short pulses, without however penalizing performance, at the same time respecting the peak power and band width typical of systems actually used in practice.

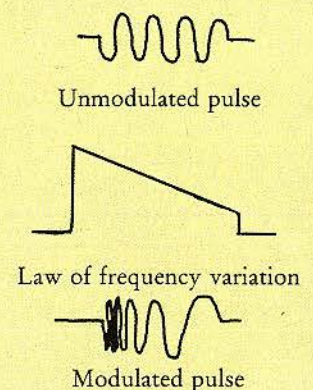
These techniques, which involve a special treatment of the signal transmitted and a special processing of the received signal, are known as linear frequency modulation and phase coding. In the first of these, the frequency is varied linearly inside each pulse (2). When receiving, a special filter is used to delay the low frequencies until the arrival of the higher ones, thus producing a narrower pulse than one transmitted at a higher peak power. The ratio between the duration of the pulse transmitted and the duration of the compressed pulse during reception is known as the compression ratio and usually has a value of 300-400:1, although values as high as 1000:1 are also possible. By means of the phase coding technique, each pulse is split up into segments, the phase of which is determined according to a well defined code. Binary code is used, the two states of which, 0 and 1, correspond to a modulation of the frequency. This coding is characterized by a high sensitivity to changes in frequency due to the Doppler effect and does not allow such high compression ratios to be obtained.

However, phase coding has the advantage of greater resistance to electronic disturbance.

SYNTHETIC APERTURE RADAR

The width of the radar beam, which affects the azimuthal resolution, is proportional to the ratio between the wavelength used and the size of the antenna. Good resolution can thus be achieved either by operating at very short wavelengths or by using a larger antenna. Unfortunately, atmospheric attenuation phenomena, which increase in strength with increasing frequency, make it impossible to use wavelengths lower than the centimetre bands (I-J) without a considerable reduction in range. Again, in the case of airborne installations, weight and volume considerations place heavy constraints on antenna size. In an initial attempt to overcome these limitations, designers exploited the relative length of the fuselage by installing the antenna parallel to the length of the aircraft. This meant that an antenna could be used of such a size as to satisfy reasonably narrow resolution requirements. A 5 m. long antenna operating at a frequency of 10 GHz, which corresponds to a wavelength of 3 cm., can provide satisfactory resolution up to a distance

Fig. 2
FREQUENCY MODULATION
IMPULSE COMPRESSION



of 10-12 nautical miles. The first radar system of this type, known as SLAR (Side Looking Airborne Radar), was tested in 1954 at the UK Royal Radar Establishment. Three years later the first operational SLAR was installed in a Lockheed R-69. In the quest for better and better resolution a 15 m. long antenna was installed in 1960 in B-58 bombers of the US Air Force. However, during the decade 1950-1960, work began in a different direction to develop the Synthetic Aperture Radar (SAR).

This concept was expressed for the first time by Carl Wiley in the USA in 1951. The system exploits the movement of the aircraft on board which it is installed in order to construct or "synthesize" a much larger antenna than the actual antenna used.

The system emits pulses at right angles to the direction of flight. Each pulse is therefore transmitted and received from different position (3).

When receiving, the echoes arriving over a time interval of several seconds are summed, thus obtaining the same result as if an antenna much longer than the fuselage of any aircraft had been used. This antenna can be likened to a hypothetical array antenna, i.e. one composed of several emitting elements. In the case in point,



these elements would simply be the different positions successively occupied by the aircraft when transmitting the pulses concerned. After a long development period, the first SAR system, named APS-73, became operational in 1961 and was used on at least one occasion during the Cuba crisis.

The systems of that generation used an optical-photographic procedure for signal generation. This procedure involved reproducing the image on film and then using a coherent light source and a lens complex to construct the final version of the radar map on a second film.

Using this technique it was possible to obtain good quality images, but only at the cost of complex processing that had to be carried out on the ground after the aircraft had landed. There was therefore no chance of making an analysis of the information contained in them in real time.

In the 1970s, the application of digital technology led to the development of devices light and small enough to be installed in most of the tactical aircraft in service at the time. Real time processing of the radar data thus became a reality.

In the more advanced SAR systems, azimuthal resolution is totally independent of the distance and is equal to half the length of the antenna installed on the aircraft. In other words, it is no longer than a few metres (4). A synthetic aperture radar provides images of a quality comparable to that of an aerial photograph

in all conditions of visibility and operating at a range of over 180 km from the target area, i.e. allowing the aircraft to keep out of the range of the enemy anti-aircraft defences. The system usually includes a data link for the transmission of the data collected to the ground in real time so that they can be promptly examined by the commands concerned. One example of digital SAR is the UPD-8 system developed by the Loral company. This system functions on a wavelength of 3 centimetres and has a maximum range of 130 km, depending on available power, with an azimuthal resolution of 6.1 m, and a range resolution of 4.5 m. At shorter distances performance is even better: at 50 km resolution is 3 m. The UPD-8 system includes a data link and can be installed in a central container built by modifying a 1,250 litre supplementary fuel tank.

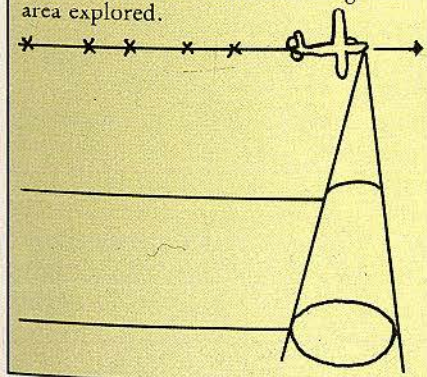
PRESENT TRENDS AND FUTURE PROSPECTS

Developments in the field of airborne radar systems for battlefield surveillance are linked essentially to progress made in synthetic aperture radar technology, in which pulse compression techniques are now constantly being used. Current research is addressed mainly to ensuring effective operation also in hostile electronic environments and to improving information processing capacity.

Fig. 3

SAR SYSTEM GEOMETRY

The figure shows the positions successively occupied by the aircraft as each pulse is transmitted, the ground imprint of the radar beam and the ground area explored.



From the point of view of interception and disturbance systems, a SAR device is a very difficult target. A synthetic aperture radar functions by illuminating a point on the ground for only a few seconds. This fact, together with the low level of the lateral lobes, which is made possible by the use of several devices, makes it an LPI (Low Probability of Intercept) system.

In order to fend off the growing onslaught of electronic countermeasures the level of the lateral lobes is being further reduced and innovative concepts such as that of bistatic radar are being developed. The latter involves installing the transmitter and the receivers on different aircraft. The transmitting aircraft, which is more likely to be detected by the enemy, operates at a considerable distance from the threat, while the receiving aircraft can approach the target area without its position being given away by the emission of radio frequency energy.

Although the results of the experiments carried out in the United States are obviously not known, the specialized press seems to indicate that the radar images thus obtained are equally as good as those obtained using monostatic radar, i.e. radar in which the transmitter and receivers are mounted on the same aircraft, and sometimes even better since target "scintillation effect" is reduced.

Very High Speed Integrated Circuits (VHSIC) appear to be very promising. The considerably greater calculation speed afforded by them can improve both range and resolution performances. New solid state technologies, increasing the signal processing capability, will also allow SAR systems to be developed which have the capacity to locate potential targets and if necessary to recognize or identify them automatically. This would greatly simplify the task of the operator who obviously has to face the problem caused by modern synthetic aperture radar of producing a huge quantity of data in a very short time, up to one million image elements per second. The algorithms used for the automatic target discovery and recognition in the United States and by the Royal Signal and Radar

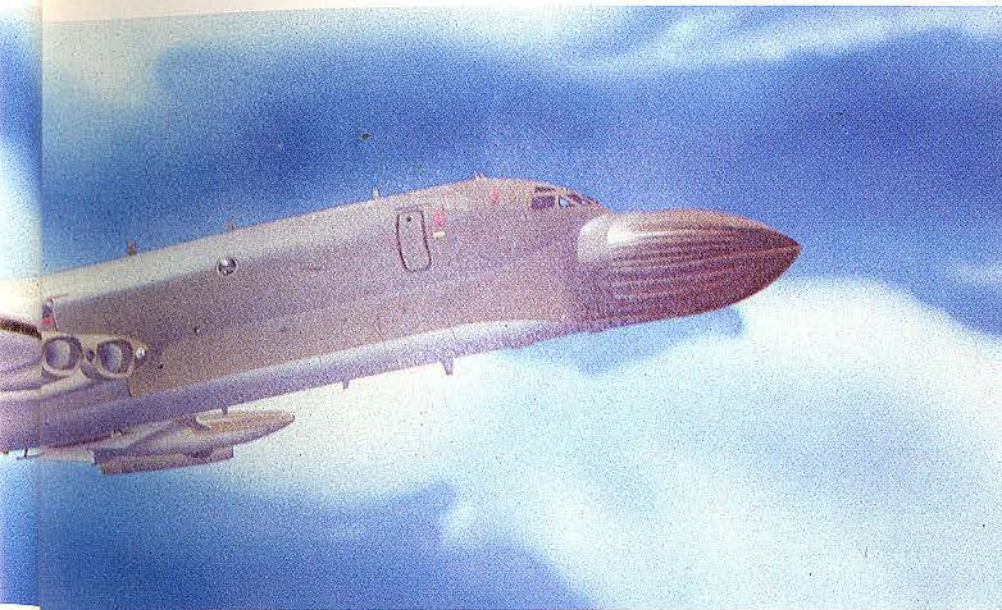


Establishment in the UK not only make use of the intensity of radar echoes, but also of signal polarization.

This represents an application of the concept of artificial intelligence designed to reduce the number and complexity of the decisions demanded from the radar image analyst. An equally important objective is to acquire the capacity to discriminate between moving and stationary targets by exploiting the shift in frequency

due to the Doppler effect.

Long-range airborne radar systems capable of scanning the enemy positions in depth will play an increasingly important role in any battlefield surveillance system. The information collected by a high flying aircraft equipped with such instruments and operating well within its own lines, i.e. beyond the range of the enemy anti-aircraft weapons, is a precious intelligence support which will allow

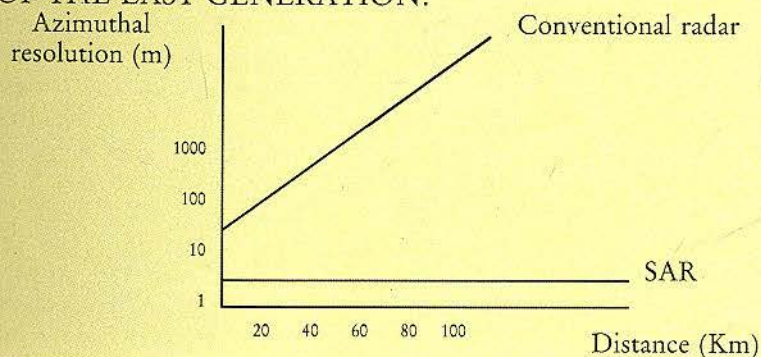


Left
Cockpit of a F/A-18 "Hornet" indicating the complexities involved in flying the aircraft.

Above
Drawing of a NIMROD AEW 3X2 285 showing the radome in the nose housing the radar system.

Fig. 4

CHARACTERISTIC PLOT OF AZIMUTHAL RESOLUTION AGAINST DISTANCE FOR A CONVENTIONAL RADAR AND FOR A SYNTHETIC APERTURE RADAR OF THE LAST GENERATION.



the enemy's moves to be countered promptly, especially those of the second echelon forces. On the strength of this information it would be possible to plan low level missions by piloted and unpiloted aircraft equipped with different types of sensors of lower resolution capacity, the use of which would however be necessary for the purpose of examining the targets in detail, controlling the fire and inspecting the damage caused.

Also in this role the electro-optical systems would be flanked by less sophisticated SAR systems. In the latter case, since the aircraft would probably be flying no higher than a few hundred feet it would be sufficient for the system to have a range of 15-20 km, which would be ample to avoid the threat posed by the forward defences. The weight and size of the devices would have to be such as to allow them to be installed in belly

pods that could be used on high performance piloted aircraft or on UMAs. A SAR system of this type using FET gallium arsenide amplifiers and provided with an electronic sensor stabilizing device by means of signal processing is being developed by a US company.

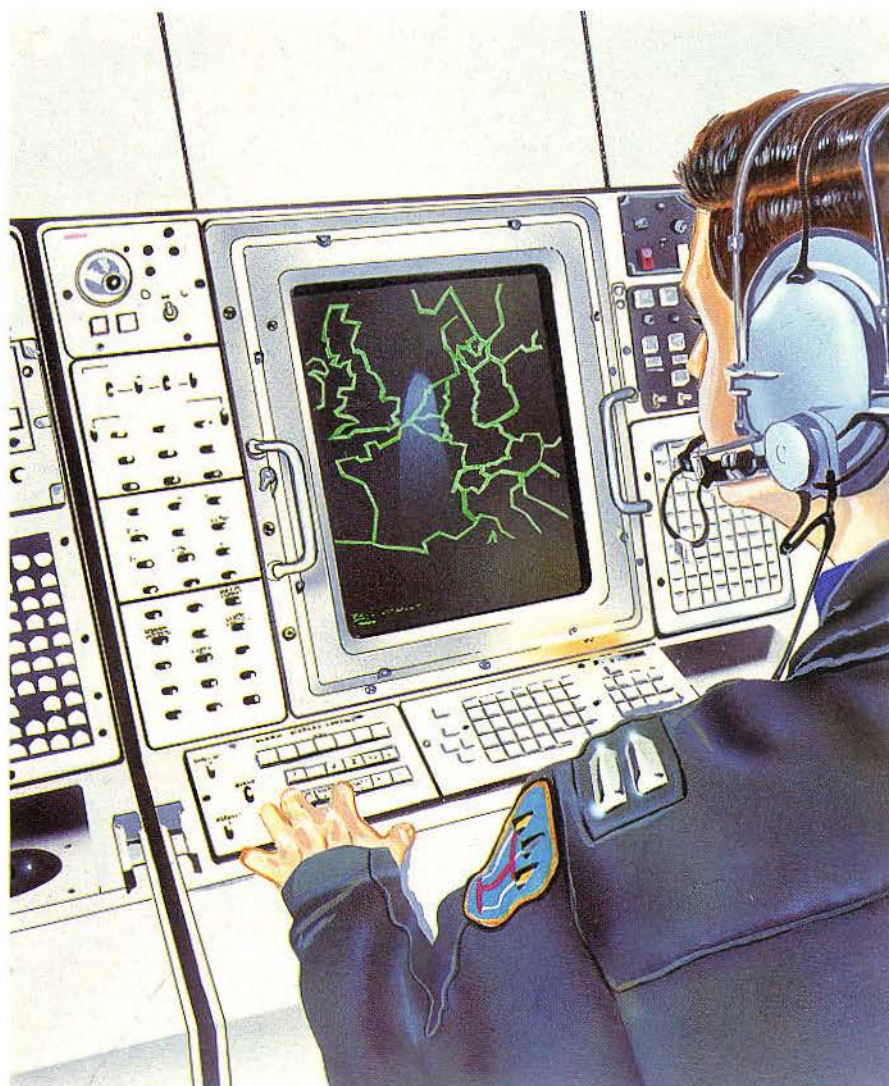
Also in this case the need to examine the image in real time or near real time means that a data link has to be used.

The use of high resolution airborne radar systems for high altitude, long range battlefield surveillance is the underlying concept of the development programmes launched by various western countries. The British ASTOR (Area Stand Off Radar) and the US JSTARS (Joint Surveillance Target Attack Radar System) both envisage the use of radar systems mounted on dedicated aircraft and data links for transmitting the data to the ground.

The ASTOR programme was launched when it had become clear from operational simulations that only with the availability of a system of this kind would it be possible to use Phoenix remotely piloted vehicles (RPV) effectively. These RPVs, equipped with electro-optical sensors, were used by the British army to satisfy their target acquisition and identification requirements. As part of the programme, which has taken on interservice characteristics, industry has developed two radar systems with different capacity and performance.

The army wants a radar capable of quickly detecting moving targets while the air force is more interested in exploring and analysing fixed installations such as airports and stores. The answer to the first requirement has been provided by a Pulsed-Doppler radar, while a SAR system has been recommended for the RAF's purposes. A decision concerning whether to produce both or only one of these systems will be taken by the end of 1988 on the basis of flight tests carried out using a twin-turbo prop *Pilatus Britten Norman BN-2T Turbo Islander* and a modified *Canberra* bomber.

The result of a joint USAF-US Army programme, also the JSTAR is



Drawing of console-table of a radar.

composed of two elements — an airborne multimode radar device and a mobile ground station which receives the raw data via a data link and processes and distributes them.

This extremely complex system, the logical outcome of the Airland Battle 2000 doctrine, should allow the commander to detect moving units well beyond the front line and to engage them using both long range ground weapons and the air force. The radar system, which has SAR capability, will be mounted in a ventral pod on a Boeing 707-320 aircraft, which will be renamed E-8A, and will be capable of carrying out the functions of command and control post. The aircraft will probably operate at altitudes of 30,000 to 40,000 feet, at least 300 km behind the front line and can remain in position for about 8 hours. As in the case of the ASTOR

system, the information collected will be supplemented by that obtained from other piloted and unpiloted aircraft equipped with various different kinds of sensors. A different solution is the one adopted by the French ORCHIDEE (Observatoire Radar Cohérent Hélicopté d'Investigation Des Elements Ennemis) system. The vector aircraft is a *Super Puma* type helicopter with a 5 m antenna, extensible when in flight, mounted on the belly. The radar device is of the Pulsed-Doppler multimode type capable of detecting both fixed and moving targets, particularly helicopters at a maximum range of 150 km. The idea is to have the helicopters operate in groups of 3 at a distance of 50 km behind the front line at an altitude of between 6,500 and 13,00 feet. In order to increase the aircraft's chances of survival the observation

time has to be limited to a few seconds and the helicopters have to change position continually at a low altitude. The ORCHIDEE system, which involves the real time transmission of data to a ground receiver, is scheduled to come into service in 1991.

CONCLUSIONS

Airborne radar systems operating in the centimetre wavelength band have become an essential component of any battlefield surveillance system involving the use of sensors functioning in different portions of the electromagnetic spectrum so that their different capacities are exploited effectively. The problem of resolution, which for a long time was an obstacle to this use of microwave sensors, has been solved using techniques such as pulse compression and synthetic aperture. It has thus become possible to exploit the range and all-weather capability of radar for the purpose of discovering, if not of recognizing, tactical targets, at the same time allowing the aircraft on which the system is mounted to stay outside the reach of the enemy's anti-aircraft weapons. Vulnerability to electronic countermeasures, a typical drawback of radar systems, has been significantly reduced by using special procedures and as a result of the SAR characteristics themselves. Further improvements are linked to the development of the concept of bistatic radar.

Capt. Basilio Di Martino

NOTES

(1) "Airborne Electro-optical Systems for Battlefield Surveillance" - *Rivista Militare* 4/85 It. Ed.

ENGLISH ITALIAN



GLOSSARY

aback (av.) to be taken	essere preso alla sprovvista	a. mission	missione compiuta
to abandon v.t.	abbandonare, desistere, rinunciare	accomplishment , s.	adempimento
abandon ship!	abbandonate la nave!	a. of a task	adempimento di un compito
to abandon the post	abbandonare la postazione	according , ag.	secondo, conforme
abatis , abattis , s.	abbattuta semplice	a. to instructions	secondo istruzioni, conforme agli ordini
ability , s.	abilità, capacità	accounting , s.	contabilità
able , ag.	abile	to accoutre , v.t.	equipaggiare, bardare
able-bodied seaman	marinaio scelto	accoutrements (s), s.	equipaggiamento, bardatura (di cavallo)
aboard , av. prep.	a bordo (di nave-aeroplano)	accuracy , s.	precisione, accuratezza
to go aboard	imbarcarsi	firing accuracy	precisione di tiro
to take aboard	imbarcare	accuracy of information	attendibilità di una notizia
abreast , av.	fianco a fianco, avanzato	a. confirmed by other sources	confermata da altre fonti
to march two abreast	marciare a due a due	a. probably true	probabilmente vera
platoon abreast	plotone avanzato	a. possibly true	possibilmente vera
squad abreast	squadra avanzata	a. doubtfully true	di dubbia veridicità
two platoon abreast and one in support	due plotoni avanzati ed uno di rincalzo	a. improbable	improbabile
abscissa , s.	ascissa	a. truth cannot be judged	non si è in grado di valutare l'attendibilità
absence , s.	assenza	achievement , s.	gesta, azione lodevole, impresa, (arald) scudo.
absent , ag.	assente	ack-ack , ag. (sl. abbr. di anti-aircraft)	antiaereo (di cannone, fuoco)
a. without leave (AWOL)	assente senza permesso	to acknowledge , v.t.	accusare ricevuta, ammettere, riconoscere (autorità, autenticità)
absorbed , ag.	assorbito	acknowledgement , s.	dichiarazione di ricevuta, riconoscimento (di autorità)
radiation absorbed (RAD/A)	dose radioattiva assorbita	acoustic , ag.	acustico
abutment , s.	sostegno, spalla (di ponte), appoggio	a. circuit	messa a fuoco acustica
academy , s.	accademia	a. mine	mina acustica
Military Academy	Accademia Militare	a. minehunting	ricerca di mine acustiche
acceptance , s.	accettazione	a. warfare	guerra acustica
a. of a request	accettazione di una richiesta	a. warfare support measures	misure di sostegno della guerra acustica
non-acceptance	mancata accettazione	a. warfare counter-measures	contromisure della guerra acustica
accident , s.	incidente	acquisition , s.	acquisizione
nuclear weapon accident	incidente ad un'arma nucleare	target acquisition	acquisizione obiettivi
vehicle accident	incidente motoristico	territorial acquisition	ingrandimento territoriale
acclimation , s.	acclimazione	acting , ag.	facente, avente funzione di
to acclimate , v.t.	acclimatare	a. captain	tenente facente funzione di capitano.
acclimation , s.	acclimazione	action , s.	azione
acclimatizable , ag.	acclimatabile	blocking action	azione di resistenza e arresto, manovra di arresto
acclimatization , s.	acclimatazione	combined action	azione combinata
to acclimatize , v.t.	acclimatare	contact action	azione di presa contatto
to accomodate , v.t.	alloggiare	containment action	azione di contenimento
accomodated , ag.	alloggiato	counteroffensive action	azione controffensiva
accomodation , s.	alloggio, ricettività, sistemazione	course of action	linea di azione
billeting accomodation	sistemazione in alloggi	defensive action	azione difensiva
accompanying , ag.	al seguito	delaying action	azione ritardante, frenaggio
a. cargo	materiale al seguito	demonstration action	azione dimostrativa
a. supplies	materiali al seguito	enemy action	azione nemica
to accomplish , v.t.	portare a termine, compiere, ultimare, realizzare, perfezionare.	fire action	azione di fuoco
to accomplish a mission	portare a termine una missione		
accomplished , ag.	portato a termine, compiuto		

ground **action**
 holding **action** (attack)
 killed in **action**
 offensive **action**
 overrunning and disrupting **action**
 radius of **action**
 shock **action**
 withdrawal **action**
 to go into **action**
 to go out of **action**
active, ag.
 a. air defence
 a. defence
 a. duty
 a. material
 a. mine
 on **active** service
activity, s.
 counterintelligence **activity**
 enemy **activity**
 intelligence **activity**
 Neutron Induced Gamma
 A (NIGA)
 patrol **activity**
 subversive **activity**
actual, ag.
 a. ground zero
 to **add**, v.t.
add!
address, s.
addresses group
 a. indicator group (AIG)
 telegraphic **address**
addressee, s.
adjacent, ag.
 a. unit
 to **adjust**, v.t.
adjustable, ag.
 a. seat
adjuster, s.
adjustment, s.
 a. of fire
adjutancy, s.
adjutant, s.
 battalion **adjutant**
 regimental **adjutant**
administer, v.t.
 to **administer** an oath
administration, s.
Administration and
 Logistics (para 4 operation order)
administrative, ag.
 a. area
 a. chain of command
 a. control

azione terrestre
 azione di fissaggio
 ucciso in combattimento
 azione offensiva
 azione di investimento e disarticolazione
 raggio di azione
 azione d'urto
 manovra in ritirata
 andare in combattimento
 fuori combattimento
 attivo
 difesa aerea attiva
 difesa attiva
 servizio attivo
 materiale di fissione
 mina a dispositivo attivo
 in servizio attivo
 attività
 attività di controspionaggio
 attività del nemico
 attività informativa
 radioattività indotta da neutroni
 attività di pattugliamento
 attività sovversiva
 reale, vero, effettivo
 punto zero reale
 aggiungere
 allungate il tiro!
 indirizzo
 gruppo indirizzi
 gruppo indicatore di indirizzi
 indirizzo telegrafico
 destinatario (di messaggio, lettera).
 adiacente, laterale
 unità laterale
 regolare, mettere a punto
 regolabile
 sedile regolabile
 dispositivo di regolazione
 regolazione, registrazione, aggiustamento
 aggiustamento del tiro
 ufficio di aiutante
 aiutante maggiore
 aiutante maggiore in seconda
 aiutante maggiore in 1ª
 dare, somministrare
 far prestare giuramento
 amministrazione
 Organizzazione Logistica e servizi (para 4 dell'ordine di operazioni)
 amministrativo
 area amministrativa (dei servizi)
 iter amministrativo
 verifica amministrativa

a. escort
 a. instructions
 a. loading
 a. movement
 a. order
 a. and logistic order
 a. plan
admiral, s.
 a. of the Fleet
 Lord High **admiral**
 rear **admiral**
 vice **admiral**
 a. ship
admiralship, s.
admiralty, s.
 court of **admiralty**
 First Lord of the **Admiralty**
admonition, s.
adopt, v.t.
advance, s.
 a. guard
 a. party
 axis of **advance**
 to **advance**, v.t.
advanced base
 the army **advanced** with difficulty
advancement, s.
advantage, s.
 a. ground
adverse, ag.
 a. weather
adversely, av.
adversity, s.
advisor, s.
 medical **advisor**
advocate, s.
 to **advocate**, v.t.
aerial, s.
 receiving **aerial**
 side looking **aerial** (SLAR)
 telescopic **aerial**
 transmitting **aerial**
aerobomb, s.
aerodrome, s.
aerodynamic, ag.

scorta amministrativa
 disposizioni amministrative
 carico amministrativo
 movimento amministrativo
 ordine amministrativo
 ordine logistico-amministrativo
 piano amministrativo
 ammiraglio
 comandante in capo della flotta
 grand'ammiraglio (G.B.)
 contrammiraglio
 vice ammiraglio
 nave ammiraglia
 ammiragliato (funzione, dignità di)
 ammiragliato, Ministero della Marina (G.B.)
 tribunale militare della Marina
 ministro della Marina
 richiamo, rimprovero, ammonizione
 seguire una linea di condotta
 avanzata, movimento verso il nemico
 avanguardia
 nucleo avanzato, nucleo forieri
 asse di movimento
 avanzare
 base avanzata
 l'esercito avanzava con difficoltà
 avanzamento, promozione
 vantaggio
 posizione vantaggiosa
 avverso, contrario
 condizioni climatiche avverse
 avversamente
 avversità
 consulente
 consulente sanitario
 difensore (di causa, principio)
 difendere, sostenere
 antenna
 antenna ricevente
 apparecchiatura per il rilevamento radar laterale
 antenna a telescopio
 antenna trasmittente
 bomba da aeroplano
 aerodromo
 aerodinamico

a. missile	missile aereodinamico	harassing agent	aggressivo di disturbo
aeromedical, ag	di sanità aerea	incendiary agent	aggressivo incendiario
a. evacuation	evacuazione aerea di malati	moderately persistent agent	aggressivo semipersistente
a. evacuation control centre	centro di controllo per l'evacuazione aerea di malati	non-persistent agent	aggressivo fugace
a. evacuation	ufficiale che controlla l'evacuazione aerea dei malati	persistent agent	aggressivo persistente
co-ordinating officer	ufficiale responsabile delle operazioni di sgombero aereo dei malati	smoke agent	nebbiogeno
a. evacuation operation officer	ufficiale responsabile delle operazioni di sgombero aereo dei malati	to aggregate, v.t.i.	ammontare
a. evacuation system	organizzazione dello sgombero sanitario aereo	the armies aggregated to 100,000 men	gli eserciti ammontavano a 100.000 uomini.
a. staging unit	ospedale per passeggeri in transito	aggression, s.	aggressione
aeronaut, s.	aeromane	aggressive, s.	offensiva
aeronautic (al), ag.	aeronautico	to assume the a.	iniziare l'offensiva
aeronautics, s.	aeronautica	aggressor, s.	aggressore
technical aeronautics	aerotecnica	agitation, s.	tumulto
aeroplane, s.	aeroplano	aglet, s.	puntale metallico che scende dalla spalla di alcune uniformi militari
fighting aeroplane	aeroplano da combattimento	agreement, s.	convenzione, patto, accordo.
reconnaissance aeroplane	aereo da ricognizione	bilateral a.	accordo bilaterale
affair, s.	affare	standardization a.	accordo di unificazione
a. of honour	duello	(STANAG)	
civil affairs	affari civili	aid, s.	aiuto, soccorso, ausilio
affiliation, s.	affiancamento	a. and comfort	aiuto e assistenza
afield, av.	al campo, sul campo	a. man	infermiere
afoot, av. ag.	in marcia	a. station	posto di medicazione
after, prep.	dopo	first aid	pronto soccorso
a. burning	post-combustione	first aid dressing	pacchetto di medicazione
after-flight inspection	verifica dopo il volo	landing aid	ausilio di atterraggio
a. war	dopo guerra	training aid	ausilio addestrativo
aftermath, s.	conseguenza	visual aid	materiale didattico
the aftermath of war	le conseguenze della guerra	aide-de-camp, (ADC), s.	ausiliario.
age, s.	era, periodo, età, anzianità	aileron, s.	aiutante di campo
space age	era spaziale	aim, s.	alettone (aeronautica)
to be promoted in order of age	essere promosso per anzianità	to take a. at training a.	mira, punto di mira, obiettivo, scopo
agency, s.	agenzia, agente, organo.	to aim, v.t.i.	mirare a
collecting agency	organo di ricerca informativa	aiming, s.	obiettivo addestrativo
directing agency of a service	organo direttivo di un servizio	a. circle	puntare (arma da fuoco)
executive agency of a service	organo esecutivo di un servizio	a. exercise	mirare
intelligence agency	organo informativo	air, s.	puntamento, punteria
military agency for standardization (MAS)	ente militare per la standardizzazione	a. alert	cerchio di puntamento
services coordinating agency	organo coordinatore dei servizi	a. arm	esercizio di puntamento
agenda, s. pl	ordine del giorno	a. attack	aria
agent, s.	agente, aggressivo	a. balloon	allarme aereo in volo
biological agent	aggressivo batteriologico	a. battle	arma aerea
blister agent	aggressivo vescicatorio	a. defence	attacco aereo
blood poison agent	tossico del sangue	a. display	aerostato
chemical agent	aggressivo chimico	a. drop	battaglia aerea
chocking agent	aggressivo soffocante	a. fleet	protezione antiaerea
		Air force	rivista, parata aeronautica
		a. force base	avvolancio
		a. evacuation	flotta aerea
		a. lift	aviazione militare
		a. map	base aerea
		a. pilot	aerosgombero
		a. raid	ponte aereo
		a. raid shelter	carta aerea
			pilota di aviazione
			incursione aerea
			rifugio antiaereo

a. route	rotta aerea	arrival airfield	aeroporto di arrivo
a. supply	aviorifornimento	departure airfield	aeroporto di partenza
a. survey	rilievo aereo	deployment airfield	aeroporto nella zona di spiegamento
a. tanker	aerocisterna	staging airfield	aeroporto di sosta
a. transportable	aerotrasportabile	airground operation	Sistema Operativo
a. transport operation	aviotrasporto	system	Aeroterrestre
airborne , ag.	aviostrasportato	airhead , s.	testa di ponte aereo
a. alert	allarme in volo	airman , s.	aviatore
a. assault	attacco aereo	airmanship , s.	arte del volo, capacità
a. command post	posto di comando volante	air movement plans , s.	piano di trasporto aereo
a. early warning and control	allarme e controllo aereo	airplane , s.	(amer.) aeroplano
a. force liaison officer	con mezzi aviotrasportati	airport , s.	aeroporto
a. force	ufficiale di collegamento	airship , s.	aeronave, dirigibile
a. interception	di forze aviotrasportate	airstrip , s.	pista di atterraggio
a. equipment	forza aviotrasportata	air support branch , s.	agenzia di concorso aereo
a. operation	centrale d'intercettazione	air transportable , ag.	aviotrasportabile
a. radio relay	aviosbarco	a.t. unit	unità aviotrasportabile
a. unit	collegamento radio in volo	airworthiness , s.	navigabilità aerea
airburst , s.	unità aviotrasportata	airworthy , ag.	atto alla navigazione aerea
air control	esplosione aerea	alarm , s.	allarme
air control team	controllo aereo	a. system	sistema di allarme
aircraft , s.	squadra di controllo aereo	fire alarm	allarme antincendio
antisubmarine aircraft	squadra di controllo aereo	to sound the alarm	dare l'allarme
a. carrier	apparecchio, aereo, velivolo	alert , ag. s.	segnale di allarme
assault aircraft	aereo antisommergibile	air alert	allarme aereo in volo
cargo aircraft	portaerei	general alert	allarme generale
fixed wing aircraft	velivolo da trasporto da assalto	quick reaction alert (QRA)	allarme aereo in pronta reazione
jet aircraft	aereo da carico	reinforced alert	allarme rinforzato
light observation aircraft	velivolo ad ala fissa	runway alert	allarme aereo sul suolo
pressurized aircraft	aereo a reazione	simple alert	allarme semplice
reconnaissance aircraft	aereo leggero dell'Esercito (per osservazione)	to alert v.t.i.	mettere in stato di allarme
rocket aircraft	aereo pressurizzato	alerted , ag.	allarmato
spotter aircraft	aereo da ricognizione	alertness , s.	vigilanza, prontezza
transport aircraft	aviorazzo	degree of alertness	stato di vigilanza
tug aircraft	ricognitore	alidad , alidad , s.	alidad
a. commander	aereo da trasporto	alien , s.	straniero, alieno
a. control unit	aereo rimorchiatore	a. land	terra straniera
a. dispersal area	comandante di controllo aereo	to align , v.i.	discendere (da un mezzo di trasporto)
a. guide	reparto di controllo tattico aereo	to align on land	(aer) atterrare
a. marshallor	zona di dispersione di aerei	to align on water	(aer) ammarare
a. marshalling area	guida per l'assegnazione dei posti per i velivoli	aligning , s.	atterraggio, ammaraggio
a. mission	segnalatore	a. area	zona di atterraggio ammaraggio
a. replenishing	zona di manovre, zona di attesa	to align , v.t.i.	allineare, allinearsi
a. scrambling	equipaggiamento particolare di un aereo	alignment , s.	allineamento
aircraftsman , s.	rifornimento aereo	all-clear , ag.	(segnale di) cessato allarme
airdrome , s.	ordine di decollo immediato	allegiance , s.	fedeltà, obbedienza (al sovrano, al governo, a un partito)
airdrop s.	aviere	alliance , s.	alleanza
a. platform	aerodromo	allied , ag.	alleato, confederato
airfield , s.	lancio dall'aereo	a. headquarters	quartier generale alleato
	piattaforma di lancio	a. nations	nazioni alleate
	campo d'aviazione, aeroporto	a. powers	potenze alleate
		a. staff	stato maggiore alleato
		Allied Communication Publication (ACP)	Pubblicazione Alleata per le Comunicazioni

to allocate , v.t.	allogare, collocare, assegnare, stanziare, distribuire	a. bread	pane d'ordinanza
allocation , s.	allogazione, assegnazione, distribuzione, collocazione, stanziamento	a. pouch	cartuccera, giberna
air transport allocation	organo per l'assegnazione del trasporto aereo	artillery ammunition	munizionamento di artiglieria
board	assegnazione nucleare	basic load of ammunition	munizioni di 1 ^a linea
nuclear allocation	assegnazione di trasporto	blank ammunition	munizioni a salve
transport allocation	assegnazione, concessione, distribuzione	chemical ammunition	munizioni a caricamento chimico
allotment , s.	ammissibile, lecito, permesso	drill ammunition	munizioni per addestramento
allowable , ag.	carico consentito (su mezzi di trasporto)	fixed ammunition	munizioni a carica fissa
a. cargo load (ACL)	assegno, indennità, spettanza, permesso, autorizzazione, razione (di viveri)	inert ammunition	munizioni inerti
allowance , s.	indennità di alloggio	live ammunition	munizioni da guerra
lodging allowance	indennità di mensa	practice ammunition	munizioni per scuola di tiro
mess allowance	indennità di viaggio	semifixed ammunition	munizioni a carica semifissa
travelling allowance	spettanza mensile	separate loading ammunition	munizioni a caricamento separato
monthly allowance	mettere a razione, razionare	service ammunition	munizioni per tiro di guerra
to allowance , v.t.	alleato, collegato, ausiliare	small arms ammunition	munizioni per armi portatili
ally , s.	allearsi	smoke ammunition	munizioni nebbiogene
to become allies	alleare, allearsi, collegare, collegarsi, confederarsi	amnesty , s.	amnistia
to ally , v.t.i.	lungo la costa	to amnesty , v.t.	amnestiare
alongshore , av.	accanto, al fianco	amperage , s.	amperaggio
alongside , av.	alpe	ampere , s.	ampere
alp , s.	alpino, alpestre	a. meter	amperometro
alpine , ag.	truppe alpine	amphibian , ag.	anfibia
a. troops	alternato, alternò, di sostituzione	a. landing force	forza anfibia da sbarco
alternate , ag.	Comando alternato di guerra	amphibious ag.	anfibia
a. Command/Headquarters (AWHQ)	alternativa, scelta	a. attack	attacco anfibia
alternative , s.	alternativo, scambievole	a. force	forza anfibia
alternative , ag.	istadamento alternato	a. operations	operazioni anfibia
a. routing	altimetro	a. squadron	squadron anfibia
altimeter , s.	altimetro acustico	a. task force	gruppo operativo anfibia
sound ranging altimeter	altitudine, quota	a. task group	gruppo tattico da sbarco
altitude , s.	quota critica	a. vehicle	veicolo anfibia
critical altitude	quota di navigazione	amplifier , s.	amplificatore
cruising altitude	quota di lancio	amplitude , s.	ampiezza
drop altitude	quota di volo	a. modulation	modulazione di ampiezza
flight altitude	ambulanza	amputation , s.	amputazione
ambulance , s.	posto avanzato di raccolta e sgombero feriti	amtrack , s.	veicolo anfibia per operazioni di sbarco
a. point	imboscata, agguato, tranello	anaesthesia , s.	anestesia
ambuscade , s.	tendere un'imboscata, un agguato	anaesthetic , s.	anestetico
to ambush , v.t.i.	imboscata, agguato	anaesthetist , s.	anestesista
ambush , s.	tendere un'imboscata, un agguato	analysis , pl. analyses, s.	analisi
to ambush , v.t.i.	emendare, emendarsi, correggere, rettificare	a. of information	analisi di una informazione
to amend , v.t.i.	correzione, rettifica, variante	target analysis	analisi dell'obiettivo
amendment , s.	munizioni, ordinanza	analyst , s.	analista
ammunition , s.	scarpe d'ordinanza	anchor , s.	ancora
a. boots		to anchor , v.t.i.	ancorare, ancorarsi, gettare l'ancora
		anchorage , s.	ancoraggio
		ancillary , ag.	ausiliario, sussidiario
		a. equipment	equipaggiamento sussidiario
		anemometer , s.	anemometro
		angle , s.	angolo
		a. of fire	angolo di tiro
		a. of site	angolo di sito
		direction angle	angolo di direzione
		high angle weapon	arma a tiro curvo
		magnetic grid angle	angolo di declinazione magnetica

safety **angle**
annex, s.

to **annex**, v.t.
annexation, s.
 to **annihilate**, v.t.
annihilation, s.
annihilator, s.
 fire **a**.
announcement, s.

ante-bellum, ag.

antenna, s.
ante-war, ag.
anthem, s.
anti-aircraft (A.A.), ag.
 a. defended area (AADA)

a. gun
 light **anti-craft** (LAA)
anti-dazzle, ag.
 a. device
 a. headlights
antifire, s.
anti-freeze, s.
 a. fluid
anti-gas, ag.
 a. mask
antigropelos, s.pl.
anti-guerrilla, s.
anti-icer, s.

anti-imperialist, s.
antimilitarism, s.
antimilitarist, s.
antipersonnel, ag.
 a. mine
antiradiation missile
antisubmarine, ag.
 a. action

a. aircraft
 a. air distant support

a. barrier
 a. carrier group

a. escort
 a. minefield

a. patrol
 a. screen
 a. search
 a. support operation

a. warfare
anti-tank, ag. (AT)
 a. artillery
 a. gun
 a. helicopter
 a. mine
antitoxic, ag.
Anzac, s.

alzo di sicurezza
 annesso (documento, allegato)
 annettere (un paese)
 annessione
 annientare
 annientamento
 distruttore
 estintore
 annuncio, dichiarazione, proclama, affisso, avviso
 anteguerra, (amer.) di prima della guerra civile
 antenna
 anteguerra, prebellico
 inno nazionale
 contraereo
 area difesa dall'artiglieria
 contraerea
 cannone contraereo
 contraerea leggera
 anabbagliante
 dispositivo anabbagliante
 fari anabbaglianti
 antincendio
 anticongelante
 olio anticongelante
 antigas
 maschera antigas
 gambali impermeabili
 antiguerriglia
 (aer) dispositivo antighiaccio
 antimperialista
 antimilitarismo
 antimilitarista
 antiuomo
 mina antiuomo
 missile antiradiazioni
 antisommergibile
 operazione antisommergibile
 aereo antisommergibile
 concorso aereo antisommergibile a distanza
 barriera antisommergibile
 gruppo antisommergibili con portaaerei
 scorta antisommergibile
 campo di mine antisommergibile
 pattuglia antisommergibile
 schermo antisommergibile
 ricerca di antisommergibili
 operazione di sostegno antisommergibile
 guerra antisommergibile
 controcarro, anticarro
 artiglieria contraerea
 cannone anticarro
 elicottero anticarro
 mina anticarro
 antitossico
 soldato dell'Australian and New Zealand Army

apparatus, s.

signalling **apparatus**

smoke **apparatus**
apparel, s.

to **apparel**, v.t.
 to **appease**, v.t.

appeasement, s.

to **appoint**, v.t.

appointed, ag.
appointive, ag.
 a. office
appointment, s.

to **appose**, v.t.
 to a. one's signature on a document
appreciation, s.

letter of **appreciation**
apprenticeship, s.
 to serve one's **apprenticeship**
approach, s.
 a. lane
 a. march.

avenue of **approach**
 covered **approach**
 cross compartment **approach**
 ridge **approach**

a. sequence
 a. schedule
 uncovered **approach**

valley **approach**

to **approach**, v.t.i.
approachability, s.
approval, s.
apron, s.

double **apron**
 loading/unloading **apron**
 parking, **apron**
arbalest, s.
arbalester, s.
arc, s.
 safety **arc**
Arctic, ag.
area, s.
 a. bombing
 a. command
 a. control centre

Corps (1914-18), pl. soldati australiani (in genere)
 apparecchio, congegno, dispositivo
 apparecchio di segnalazione
 apparecchio fumogeno
 armamento, equipaggiamento
 armare, equipaggiare
 pacificare a prezzo di concessioni
 pacificazione a prezzo di concessioni
 fissare, stabilire, assegnare, nominare
 fissato, designato, nominato
 assegnato per nomina
 carica ottenuta per nomina
 nomina, carica, incarico, assegnazione di un comando
 apporre
 apporre la firma a un documento
 apprezzamento, stima, valutazione, elogio
 lettera di elogio
 tirocinio
 fare tirocinio

avvicinamento, pl. approcci
 corridoio di avvicinamento
 marcia di avvicinamento (a contatto imminente)
 via tattica
 avvicinamento al coperto
 avvicinamento su terreno compartimentato
 avvicinamento in cresta o su dorsale
 ordine di avvicinamento
 orario di avvicinamento
 avvicinamento allo scoperto
 avvicinamento su fondo valle
 fare degli approcci con accessibilità
 approvazione, benessere
 area delimitata, graticciata protettiva, siepe, (artigl.) bocchetta
 siepe di filo spinato doppia
 area di carico e scarico
 area di stazionamento (aer.)
 balestra
 balestriere
 arco
 arco di sicurezza
 artico, polare
 area, zona
 bombardamento di zona
 comando di zona
 centro di controllo regionale

a. damage control	controllo della sicurezza di una zona	a. supply	munizionamento
a. of influence	zona d'influenza	armature , s.	armatura
a. of interest	zona d'interesse	armband , s.	bracciale distintivo
administrative area	area amministrativa (logistica)	armed , ag.	armato
air defence area	area vulnerabile	A. Forces	Forze Armate
antiaircraft combat area	area di combattimento antiaereo	a. neutrality	neutralità armata
antiaircraft defended area	area difesa dall'artiglieria contraerea	a. recce	ricognizione armata
a. of intelligence interest	zona di interesse informativo	a. reconnaissance	armato di moschetto
a. of lines of communication (G.B.)	retrovie	a. with a rifle	armigero
a. of militarily significant fallout	zona di caduta radioattiva di interesse militare	armiger , s.	armistizio
a. of operations	zona delle operazioni	armistice , s.	forze di terra
a. of responsibility	zona di competenza	army forces	araldico
a. of surveillance	zona di sorveglianza	armorial , ag.	portante lo stemma, blasonato
Army service area	zona dei servizi di armata	with armorial bearings	studioso di araldica
assembly area	zona di raccolta, zona di attesa	armorist , s.	araldica
battle area	area della battaglia	armory , s.	armatura, corazza, blindatura, mezzi corazzati, scafandro
bivouac area	zona di riposo	armour , s.	scudiero
built-up area	zona abitata	a. bearer	blindato, corazzato
closed area	zona interdetta	a. clad	piastra di protezione
contaminated area	zona contaminata	a. plating	rivestire d'armatura, corazzare, blindare
contingency area	area di contingenza	to armour , v.t.	corazzato, blindato, protetto
Corps service area	Zona dei servizi di Corpo d'Armata	armoured , ag.	autoblindo
dangerous area	zona di pericolo	a. car	divisione corazzata
defensive area	area difesa	a. division	veicoli blindati da combattimento
deployment area	area di spiegamento	a. fighting vehicles	mezzo protetto per trasporto di personale
dispersive area	zona di diradamento	a. personnel carrier (APC)	treno blindato
Division service area	zona dei servizi divisionali	a. train	unità corazzata
employment area	zona d'impiego	a. unit	carro gittaponte
Force administrative area	area amministrativa di una Forza	a. vehicle launched (AVL)	
gunfire area	area battuta dal fuoco antiaereo	bridge	veicolo blindato semi cingolato
loading area	zona di carico	a. vehicle, half tracked	veicoli blindati cingolati
main resistance area	posizione di resistenza	a. vehicles tracked	veicoli blindati cingolati da trasporto
mined area	zona minata	a. vehicles tracked cargo	veicoli blindati ruotati
minefields area	zona minata	a. vehicles wheeled	armaiolo, armiere
objective area	zona degli obiettivi	armourer , s.	armeria, arsenale, fabbrica d'armi, sala d'armi
rear area	retrovie	armoury , s.	armi (da fuoco)
restricted area	area riservata	1. arms , s. pl.	armi da fuoco
staging area	zona di sosta	fire arms	armi bianche
strategical concentration area	zona di raduno	side-arms	armi portatili
target area (TA)	area degli obiettivi dell'Areonautica	small arms	servizio militare, assetto di guerra
temporary staging area	zona di sosta temporanea	2. arms , s. pl.	compagno di armi
unit area	settore di reparto	comrade in arms	armato, pronto alla guerra
unit defence area	zona difesa da un reparto, settore difensivo	in arms	in assetto di guerra
unit sub-area	sottosettore	under arms	essere sotto le armi
vulnerable area	zona vulnerabile	to bear arms	deporre le armi, cessare le ostilità
arm , s.	arma (vedi arms)	to lay down arms	iniziare le ostilità
to arm , v.t.i.	armare, armarsi	to take up arms	uomo d'arme
armada , s.	flotta di navi da guerra	man at arms	armi
armament , s.	armamento	3. arms , s. pl.	interarma
a. race	corsa agli armamenti	combined arms	armi combattenti (Fanteria, Cavalleria, Corazzati, ecc.)
		fighting arms	

supporting **arms**

4. **arms**, s. pl.

coat of **arms**

army, s.

a. Artillery

a. club

a. Corps

a. group

a. list

Field **Army**

standing **army**

to assemble an **army**

to be in the **army**

to gather an **army**

to go into the **army**

to join the **army**

arquebus, s.

arquebusier, s.

to **arrange**, v.t.i.

to **a.** a meeting

to **a.** a treaty

arrangement, s.

a. for delivering fire

array, s.

battle **array**

to **array**, v.t.

arrear, s.

arrest, s.

under **arrest**

a. in quarters

close **arrest**

to **arrest**, v.t.

arrival, s.

estimated time of **arrival**

arrogation, s.

arsenal, s.

arson, s.

to commit **arson**

artery, s.

main signals **artery**

artificer, s.

artillerist, s.

artillery, s.

antiaircraft **artillery** (AAA)

antitank **artillery**

army **artillery**

coastal **artillery**

Corps **artillery**

detached **artillery**

divisional **artillery**

field **artillery**

fortress **artillery**

general support **artillery**

heavy **artillery**

horse **artillery**

light antiaircraft **artillery**

armi di supporto (Artiglieria, trasmissioni, Genio, Aviazione dell'Esercito)

arma (arald.)

scudo araldico, stemma

esercito, armata

artiglieria di armata

circolo militare

Corpo d'Armata

gruppo di Armate

annuario militare

Armata

esercito permanente

raccogliere un esercito

prestare servizio militare

raccogliere un esercito

entrare nell'esercito

entrare nell'esercito

archibugio

archibugiere

accomodare, ordinare,

preparare, predisporre

predisporre una riunione

preparare un trattato

sistemazione, di posi-

zione, organizzazione, or-

dinamento accordo

preparazione del tiro

ordine, spiegamento schiera

ordine di battaglia

schierare, spiegare

retroguardia

arresto

agli arresti

consegna

arresti di rigore

arrestare, fermare, bloccare

arrivo

presunta ora di arrivo

usurpazione

arsenale

incendio doloso

provocare un incendio

dolosamente

arteria, asse

asse principale dei col-

legamenti

artificiere

artigliere

artiglieria

artiglieria antiaerea

artiglieria controcarro

artiglieria d'armata

artiglieria costiera

artiglieria di Corpo d'Armata

artiglieria decentrata

artiglieria divisionale

artiglieria da campagna

artiglieria da fortezza

artiglieria massa di manovra

artiglieria pesante

artiglieria a cavallo

artiglieria leggera con-

traerea

mechanized **artillery**

medium **artillery**

mountain **artillery**

naval **artillery**

pack **artillery**

self-propelled **artillery**

siege **artillery**

towed **artillery**

artilleryman, s.

ascent, s.

ashore, av.

asperity, s.

asphyxia, s.

asphyxial, ag.

to **asphyxiate**, v.t.

asphyxiating gas

assault, s.

a. aircraft

a. echelon

a. position

a. shipping

a. unit

airborne **assault**

main **assault**

seaborne **assault**

secondary **assault**

tank **assault**

to take a town by **assault**

assaulting, ag.

a. echelon

a. troops

to **assemble**, v.t.i.

assembly, s.

a. area

assembly hall

to **assess**, v.t.

assessment, s.

logistic **assessment**

to **assign**, v.t.

to **assign** a mission

assigned, ag.

a. combat battalions

a. forces

assignment, s.

assistance, s.

logistic **assistance**

medical **assistance**

assistant, s.

asylum, s.

political **asylum**

Atlantic, ag.

a. Charter

North **A. Treaty**

atom, s.

atomic (al), ag.

a. bomb

a. demolition munition (ADM)

artiglieria meccanizzata

artiglieria pesante campale

artiglieria da montagna

artiglieria navale

artiglieria someggiata

artiglieria semovente

artiglieria da assedio

artiglieria trainata

artigliere

salita

sulla spiaggia, a riva

asperità (di terreno),

rigore (di clima)

asfissia

di asfissia

asfissiare, soffocare

gas asfissianti

assalto

aereo d'assalto

scaglione d'assalto

distanza di assalto

navi d'assalto

unità d'assalto

avioassalto

assalto principale

assalto dal mare

assalto secondario

assalto carrista

prendere una città d'assalto

d'assalto

scaglione d'assalto

truppe d'assalto

riunire, riunirsi, adunare,

adunarsi, mettere insieme

adunata, raccolta, riunione

zona di raccolta, zona di

attesa

sala riunioni

valutare, stimare, prevedere

accertamento, stima,

previsione

previsione logistica

assegnare, incaricare

assegnare una missione

assegnato

battaglioni di combat-

timento assegnati

forze assegnate

incarico, compito, lavoro

assegnato, assegnazione

(di denaro)

assistenza, supporto, aiuto

assistenza logistica

assistenza sanitaria

assistente, aiutante, vice

asilo, rifugio

asilo politico

atlantico

Carta atlantica

Patto Atlantico

atomo

atomico

bomba atomica

mina nucleare

a. energy
a. warfare
a. weapon
to attach, v.t.i.

attached, ag.

a. unit

attaché, s.
military **attaché**
attack, s.

a. against built-up area
a. against delaying positions
a. against discontinuous resistance
a. against fortified positions
a. against organized positions
a. in depth
a. position

air **attack**

amphibious **attack**

converging **attack**

conventional **attack**

daylight **attack**

diversionary **attack**

enveloping **attack**

flank **attack**

frontal **attack**

holding **attack**

main **attack**

night **attack**

nuclear **attack**

on order **attack**

secondary **attack**

simulated **attack**

surprise **attack**

time of **attack**

attempt, s.

a. to escape
to make an **attempt** on the State

to attempt, v.t.

he **attempted** the life of the President

attempter, s.

to attend, v.t.i.

to attend orders

to attend the Higher War Institute

to attend one's country

to attest, v.t.i.

attrition, s.

a. rate

war of **attrition**

augmentees, s. pl.

authentication, s.

authority, s.

energia atomica
guerra atomica
ordigno atomico
unire, assegnare, aggregare

assegnata, aggregata, unita, di rinforzo
unità assegnata di rinforzo

addetto (d'Ambasciata)

addetto militare

attacco

attacco in zona abitata

attacco contro posizioni

ritardanti

attacco contro resistenza

discontinua

attacco contro posizioni

fortificate

attacco contro posizioni

organizzate

attacco in profondità

base di partenza per l'attacco

attacco aereo

attacco anfibio

attacco convergente

attacco convenzionale

attacco diurno

attacco sussidiario

attacco avvolgente

attacco sul fianco

attacco frontale

attacco di fissaggio

attacco principale

attacco notturno

attacco nucleare

attacco su ordine

attacco secondario

attacco simulato

attacco a sorpresa

ora dell'attacco

tentativo, prova, attentato

tentativo di evasione

attentare allo Stato

attentare

attentò alla vita del Presidente

attentatore

obbedire, frequentare,

essere al servizio di

eseguire gli ordini

frequentare la Scuola di Guerra

essere al servizio della Patria

arruolarsi

attrito, logoramento

tasso di logoramento

guerra di logoramento

personale di rinforzo

autenticazione

autorità

civilian **authority**

customs **authority**

military **authority**

authorization, s.

authorized, ag.

Automated Command Control Information System (ACCIS)

automatic, ag.

a. data handling

A. Data Processing (ADP)

a. control system

a. message distribution system

a. pilot

a. toss

a. weapon

semi **automatic** weapon

autonomy, s.

logistic **autonomy**

auxiliary, ag.

a. ship

a. troops

auxiliaries, s. pl.

availability, s.

available, ag.

a. forces

a. supplies

avalanche, s.

avenue, s.

a. of approach

average, s.

a. time

aviation, s.

Army **aviation**

combat **aviation**

awowed, ag.

an **awowed** enemy

award, s.

a. for valour

to award, v.t.

to a. damages

axis s.

a. of advance

a. of control

a. of signal communications

converging **axis**

azimuth, s.

a. angle

a. circle

a. difference

grid azimuth

magnetic **azimut**

autorità civile

autorità doganale

autorità militare

autorizzazione

autorizzato

Sistema Informativo Automatizzato per il Comando e Controllo

automatico

trasmissione automatica

dei dati

elaborazione automatica dei dati

sistema di controllo automatico

sistema automatico

distribuzione messaggi

pilota automatico

lancio automatico (bombardamento)

arma automatica

arma semiautomatica

autonomia

autonomia logistica

ausiliario

nave ausiliaria

truppe ausiliarie

milizie ausiliarie

disponibilità

disponibile, utilizzabile

forze disponibili

approvvigionamenti

disponibili

valanga

strada, via, accesso

via tattica

media

tempo medio

aviazione

aviazione dell'Esercito

aviazione da combattimento

confessato, manifesto,

aperto, dichiarato

un nemico dichiarato

onorificenza, ricompensa

ricompensa al valore

assegnare, conferire,

risarcire

risarcire i danni

asse

asse di movimento

asse di controllo

asse dei collegamenti

asse convergente

azimut

angolo azimutale

cerchio azimutale

parallasse

rete azimutale

azimut magnetico



THE DURHAM LIGHT INFANTRY
(68TH & 106TH FOOT)



MINISTERO DELLA DIFESA

COMANDO MILITARE MITTENTE **DISTR. MIL. ANCONA**

N. 00

RACCOMANDATA R.R.

AL SIGNOR

COGNOME E NOME **TONI VALTER**

INDIRIZZO **V. CARLO POMA 5**

C.A.P. **61032**

COMUNE DI RESIDENZA **FANO**

MATRICOLA **00 1 5546** Data di nascita **26/8/63**

STAZIONE CC. **FANO**

UFFICIO POSTALE **FANO 2**

Per disposizione del Ministero della Difesa la S.V. è tenuta a presentarsi il giorno **11 MARZO 1987**

entro le ore 12 al:

ENTE ADDESTRATIVO D'ASSEGNAZIONE

45° BTG. FANTERIA "ARBOREA"

11 MARZO 1987

LOCALITÀ **MACOMER (NU)**

STATO MAGGIORE DELL'ESERCITO

III REGIMENTO

Ufficio Rivista Militare

11 MARZO 1987

Corrente con la posta

CONSCRIPTS

FROM DISCOMFORT TO INTEGRATION

A GENERAL LIMIT

When we talk of "the young" we risk an exaggerated generalization, which allows for any type of statement and its opposite. The danger, however, turning an extremely multicoloured reality into a metaphor, may discourage any attempt at going into details. We are therefore limited by the awareness that every individual story is unrepeatable and original and therefore practically unique, as well as by the need for more general schemes which allow us to go beyond the private dimension.

Thus one feels the ancient limit between analysis and synthesis in the knowledge process, which becomes even more relevant when the research is related to such a complex topic as that of the young. A reality integrating their psychosomatic structure but also the geosocial environment in which they live.

Moreover the "young conscript" expresses great extension and complexity, since all the young population, without socioeconomic class distinctions or differences in their geographical distribution, is called to military service.

All complexities have to be simplified, but not to the point of becoming

fiction. So, a limit to knowledge does not mean misunderstanding (or incomprehensibility) but limited knowledge. An adjective that probably belongs to scientific research itself, and which must always be kept in mind when dealing with a subject such as that of young people, where extreme variability must be added to polymorphism the former no longer dictated by the rhythm of biological generations (25 years) but by that of psychologic generations (which are sometimes separated by a two-year period).

A PROFESSIONAL LIMIT

This general limit already gives me the attitude of someone making his own remarks with the highest respect for the experience of those, such as the military Cadres, who for many years have been living the relationship with the world of the young. Certainly without the formalism which, in the past, did not permit to see what could be gained from the military experience, especially for the understanding of the world of the young.

A further limit derives from my observation point, mainly focused on marginalization. All observatories are

partial, and this one is also very peculiar because it analysis a suffering and self-destroying youth, hiding behind drugs, violence, insanity, criminality or passivity, living outside the social dynamics. My cooperation inside the military institution was also concerned with serious psychopathological behaviours.

*This world to which I have devoted my professional activity is a significant test for the whole of the society of the young. It is not an aberrant deep-rooted part and therefore a *lusus naturae* compared to other young people, but a thermometer which also allows to check the health of those who still do not show symptoms of illness. Those dynamics are the extreme poles of a creeping though unnoticed malaise. I have learnt that marginalization is a juvenile phenomenon tout court and not only a phenomenon from which most are immune. A recent historical example is provided by drug addiction. In the 60s, it was thought to exist only at certain social levels and in certain youngsters. Nowadays we know that there are no immune areas and that the phenomenon does not make distinctions, and every young person is a potential user of substances for non-therapeutic use (drugs).*



CONSCRIPT

After these necessary considerations, let us now speak of the young soldier. We shall divide our observations into two parts: how he arrives and how he returns.

The arrival

The youth usually arrives with no information or with the wrong information on the meanings of what he is about to do. Usually he has a perception of the uselessness or of the damage for his own personal story (not least, the professional aspect). In

any case he thinks that what is about to begin is something annoying which he has not chosen and does not like. Sometimes there can be a prevailing passive attitude, such as when facing a misfortune. Sometime there is a feeling of ideological antagonism contrary to all the philosophy of aggression, clearly represented by arms.

An analysis of these common attitudes, leads us to see that they are not at all strange: they are indeed the consequence of a system of information and background.

During the school years, there is no information or education regarding the Armed Forces. There is no history

placing them inside the Republic. We never see the stages of their introduction in our Constitution. It seems a hidden chapter, something society is ashamed of and therefore something the young ignore.

But why this silence? Should not such questions be asked before asking why the young reach their military service with a negative attitude?

When the Armed Forces are mentioned, the talk is limited to certain "corps", creating a disparity that, while increasing the importance of a specialization, automatically diminishes, in the view of the young the value of anything different. Sometimes we talk

about the Armed Forces in connection with national disasters. That is to say, as civil forces. But, is this not an unconscious desire to hide them, to make them more acceptable?

A society that undresses its soldiers of the uniform so as not to see that they are military, must ask itself a basic question, and if it thinks that the Armed Forces have a present precise meaning, then it should give them the most beautiful and functional uniform, and not a locker in which to hide it before leaving the barracks. What is a young soldier's view when faced with this continuous change of masks? The problem of integration of the military population with the civilian one is not solved by hiding uniforms, but by cooperating to favour the acceptance of the Armed Forces in a country which has decided to form them with all its sons.

Why do we continue to offer a distorted image of the Armed Forces, in a society where everything becomes image? It is negative for the young people that have to face military service. It is necessary to solve the problem of how to present them, not only in their contents but also in their form, in the images that one wants to stand out. An important aspect of the Armed Forces should be that of how they are advertised.

The young arrive with no ideals. Very often they think of a day by day life. The future is limited to daily news.

Without a perception of the future, how is it possible to talk of preparing for the future? And without future, how can we set values to which to conform and on which to model behaviour?

The most important directive of today's juvenile world is opportunity. Actions do not follow principles but circumstances, and therefore chance. There are no criteria good enough to say no and there are none to say yes. In this confusion it is impossible to choose, or to choose with method. We select a way, but we could have done exactly the opposite. There is no perception of good or bad:



everything is included in a coherence of the moment.

In this perception of the future we must also include juvenile suicides. Without a dimension of the future, the distinction between life and death is insignificant and death can appear as a solution to a frustration generating anxiety and worries at that moment. Considering that "afterwards" things will change, that it is "possible" to become actors of our own history and therefore change the anxiety, is something that has lost its significance. Every prospect disappears

in the *hic et nunc* and, if disagreeable, it can be cancelled. Therefore one can commit suicide for reasons that appear futile to those used to a logic of sacrifice or who have even projected themselves in a dimension of eternity. But without these prospects, any frustration can become enormous, because it does not have a value with which it may be measured and is calculated only with the emotional parameter, which may present as an enemy even the person one loves. Any frustration may be the origin of suicide. Not school life, but a bad



mark. Not solitude, but a lover's quarrel. Not military life (as a system) but a day's leave postponed or an unexpected duty. Not a depressive syndrome but the disappointment of a moment.

Therefore, young people come to the military service without a perception of the future, thus particularly susceptible and incapable of accepting frustrations. And with these young people we must create an Army. With disenchanted youngsters, coming from quarrelsome or silent families, where only television speaks. They come from a school that annuls, with unemployment, any effort required or any indifference punished. They come from a society where success is pursued at all costs and with all possible means, and he who leads an ordinary life feels he does not exist. Either you live on success or you are socially dead. They come from a society where power becomes arrogance and sometimes violence, even if hidden behind a smile. From a society where even love has no longer the taste of stability; where it is difficult to have

a house and even the means to furnish it. From a society that gives many useless things, but not the essential ones. Many decorations but not substance. A society in which the young acquire an ideological independence from their parents, but not an economic one, and therefore they live as parasites with those who no longer approve of their behaviour. Very often the Armed Forces represent a condition which underlines already existing inadequacies. It is necessary to pay attention to the young and their rapid changes. A permanent observatory to follow their characteristics and programme an adequate future and therefore a way to organize their work and provide them with opportunities for their free time, controlling the artificial induction of needs. Every promotion of a need also means the induction of a frustration, if not gratified. Hence the race for objects, for the identifications on labels and *griffes*. Nowadays we are what we wear. With a pair of shoes we belong to a group. Through clothes we create differences: the "heavy metals" are

enemies of the other groups and fight them. The way one dresses causes disagreements.

An incentive to success cannot be promoted by a society that subsequently cannot guarantee it. This would mean promoting frustration, failure and the resulting behaviours. Often society is astonished by what it promotes. A society which improves too much cannot educate to planning. When news fragmented by the spots and the infinite number of TV channels on which we tune prevails, one cannot hope to have a critical capacity and an analytical choice. Young people reaching the military service are fragile and scared. They have little capacity to adapt to new situations and feel great uncertainty. A vulnerability which is not linked to a specific object of fear but to something undefined. Fear expresses itself in a wish to escape — which means passivity, depression, indifference — or with aggressivity, and therefore with continuous transgressions, provocations and even violent behaviours or destructive explosions (apparently for no reason whatever). Among the transgressions, there is also the use of drugs.

This is the youth the Armed Forces receive and on whom they have to carry out the aims set by the Institution itself.

The departure

He must go back home knowing how to be a soldier, having acquired a specific role ordered by our Constitution, through the most advanced methods. But I shall not enter this sector because I do not know it. I shall not even talk of the need to update the instruments and training methods, to avoid a losing comparison with the extramilitary experience, which makes high technologies felt in every sector of daily life.

Instead I shall refer to the need that those who depart acquire a frame of mind without which no specific design, not even high operational efficiency, would have a meaning.

Those who depart must have learnt what authority and service mean i.e. devotion to others.

Let us not think that the young do not need authority. Without authority no learning or growing process is possible. A child who does not feel the authority of his parents feels abandoned and unloved. The adolescent tends to oppose himself to his parents' authority, but in a dynamic game which makes it necessary. It is an opposition used to prove that one is able to achieve success and authority. It is necessary confrontation. Without authority, also in this segment of the development there arise behavioural pathologies caused by the absence of authority. In short, it is time we put aside ideas that children have to grow without father and mother and without social rules. A tendency to oppose does not contradict the need for authority, but rather demonstrates the need for opposition, which implies the presence of an authority as a necessary reference.

But the problem is: what kind of authority?

Certainly not gratuitous domination. This attitude is masked aggression. And authoritarianism is present in the barracks. I think that authoritarianism is always a reaction to the lack of exercised authority. Officers and non-commissioned Officers must exercise authority and avoid authoritarianism. For this reason, they themselves must not be frustrated. We cannot have good teachers when they are socially put aside, first for social considerations and then for the lack of economic recognition. A country cannot turn teachers and military into a marginalized class and then expect the serenity in which to exercise an authority originating from real values.

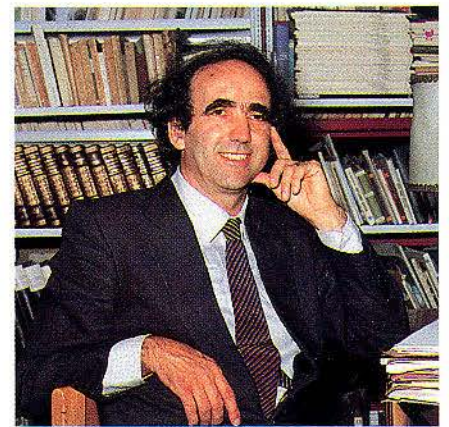
Authority is a behaviour that may be analyzed and up to a certain point even taught. In the training of Officers and non-commissioned Officers, there must be a predominance of the disciplines of decision making, that do not include only the great strategies of the General Staffs, but also the daily ones of interpersonal relationship between people with different responsibilities and hierarchical ranks, and therefore also the relationship with the young conscript. When facing pro-





me to be full of wisdom, of popular history. No doubt, without the perception of the future the young people of today are like canes in the wind, without hope. There is no doubt however that those perceiving the future to eternity find it more and more empty if they imagine it without them, without the young. It may be for this reason that I love the young, even when I feel them far away from my youth. And the more I see them confused and mistaken the more I love them.

Vittorino Andreoli



blems in military communities, one must not only consult doctors and psychologists, but also talk to those responsible for the smaller units (for example, the battery Commanders).

One must not make the mistake of encouraging an excessive "medicalization" or "psychologicalization" because that would mean promoting only a great impotence covered by science (and words).

One must not forget that without authority, the young form authoritative groups. They thus look for authority in new bodies. They look elsewhere for what is not given to them in the present social groups. They thus organize themselves hierarchically within their marginalization: in criminal groups, terrorist groups, in the world of drugs, in the groups "in fashion", which cause upheavals in the stadiums (the yellow-blue brigades of my hometown), young people with a very strict hierarchy and strong exercise of authority.

Everything must be done so that those returning from military service receive the imprint of "serving the others". Strangely enough in this

society of communications we have lost the dimension of the others. Everybody talks to himself as if in a mirror. Nowadays loneliness is felt in the middle of crowded squares. It is necessary to show the young people that the service ordered by the Constitution is necessary for others, for a group, for a Nation. The presence of the "other". The need for the "other", even for the person one does not know. And it is our duty to make the young understand that there is a need for an education for all services, for all types of service.

It must therefore be taught that the conscription period though it does not seem to give an advantage for the individual, gives it to a community, inside which each of us finds himself. A teaching necessary to break the individualisms, tied to the uncertainty of tomorrow and to a denied and never announced future.

IN CONCLUSION, A WISE COMMONPLACE

I shall end with one of the commonplaces which sometimes seem to

Dr. Vittorino Andreoli graduated in medicine at Padua University and specialized in psychiatry and neurology at Milan University. Before starting his medical career, he qualified for university teaching in pharmacology and toxicology at the Pharmacologic Institute of Milan and was a researcher on the normal and pathological activity of the central nervous system at the Department of Biochemistry at Cambridge University, at the Department of Neuroanatomy at Cornell Medical College of New York and at the Department of Psychiatry at the General Hospital of Harvard University. He is the author of several works on biological and clinical subjects related to behaviour and its pathology; among them "The Third Way of Psychiatry" and "The Norm and the Choice". He is coauthor of "Drug Cycle" and "The Armed Forces and Drugs".

At present, Dr Andreoli is Chief Physician at the Verona Psychiatric Services and professor of medical sociology and cultural anthropology at the University of Verona.





THE SAFEGUARD OF THE



YOUNG RECRUITS' HEALTH

Health is something which, for both different and coinciding motivations, mutually concerns the State and the individual. Therefore, general interests and those of the single are polarised on it in various ways with multifarious possibilities of achieving the aim.

Hence, the individual's claim on the State for the safeguard of health as a natural right and as something he is personally entitled to; hence, the State's power-duty to intervene on the citizen in the general interest of the community when public health is threatened.

However, what kind of health may the individual citizen demand the State and the latter, in a sense, impose on the individual?

The well-known idea of health proposed by the World Health Organization goes beyond the biopsychologic and clinic one and, socially and juridically speaking, it harmonises with the trends inspiring the ideologies and structures of the modern States and ends up in the sphere of ethics advancing possible solutions within the systems of social security already existing or under way.

We must realise however, that the analysis of the idea of health as proposed by the World Health Organization shows us something rather elastic and opinable regarding the possibility that every individual has of achieving the best possible health condition taking into account not only his constitutional characteristics but also his elective habitat.

The fact remains, however, that the merit of the definition developed by the World Health Organization lies in having underlined the co-relationship between the technical and social aspect of health by which the latter becomes co-related with the normal biophysiological functions



of the human body as well as with the intrinsic state of welfare not resulting from the above normality which includes the possibility of expressing the person's features within the intellectual and social sphere.

It therefore rightly includes that part of the extra-biologic sensation of well-being which may be summarised in joy of living.

This principle, however, demands the pursuit of two priorities which are not only of a medical kind though the disturbance caused by one of them always ends up by creating problems of a medical type.

On the one hand, the up-keep, promotion and recovery of the psycho-physic integrity, on the other the achievement of a state of welfare as a result of a harmonious integration of the individual into the collectivity.

The latter aspect above all is both factor of mental harmony and psychic well-being, seeing that, as Prof. Andreoli stated in a meeting some time ago, behaviour is essentially the result of three factors: the

characteristics of the individual's personality, the dynamic reaction with his neighbours, the environment as regards cultural, social and geographic features.

If all the above is true, as it is, it is clear that the question of the recruit's health is both easy and difficult at the same time.

It is easy if we consider that the Army Medical Service has to take care of the health of a population of young, healthy people with a sufficient degree of physical sturdiness. Strangely enough, however, this situation makes our Institution more responsible and assigns it burdensome tasks for the Armed Forces, which recruit a healthy youth and have to send him back to the nation healthy, have to make him live and work in an environment where the action of certain morbid noxae show up either directly or as a potential danger.

In this sense, the problems facing our organization are rather serious.

As regards health, Armed Forces come in touch with citizens on



Nowadays there is a great demand for professionalism designed to guarantee diagnostic accuracy as well as research and singling out asymptomatic and paucisymptomatic alterations which may be considered the basis of future disabling morbid developments.

In this respect, I am happy to say that a true and proper mass screening is under way which includes electrocardiograph, spirometric and personalologic examinations besides the medical examination, urine analysis and thorax screening. Five specialists, that is 2 cardiologists, 2 psychiatrists and 1 radiologist are present at the recruitment-selection stage. To this, a further medical check-up will be added with blood analyses and the examination by the otorhinolaryngologist.

These technical changes will be accompanied by a new structure in the organization of the recruitment-selection with a re-definition of the body of consumers for a better distribution of the job of selection on all the territory.

As regards the commitment designed to evaluate the psychophysical conditions of the young recruits, we believe that particular attention must be paid to medical activities during incorporation.

In fact, these examinations are performed together with the dynamic evaluation of the individual when he first comes in touch with the military collectivity and must satisfy, physically and mentally, the needs of a new pattern of life. It is the central moment of the verification, the moment in which the fitness of the anatomic structures and biologic energies is valued as regards the nature and entity of the training engagements.

As regards the above, our medical structures with the training organisations must reach, in some cases at least, satisfactory adjustments in quality.

The recent experiment made at the Recruit Training Battalion of Orvieto gave very satisfying results. In the incorporation stage, recruits were again submitted, before starting

various occasions: recruitment, instruction and training, drills, barracking, institutional employment, working activity. The workers of the sector, however, know very well that the different stages mentioned above, may in fact be reduced to three: recruitment, training and institutional employment.

The above stages must be considered as linkages which generally speaking connect the first, civilian life to military life, the second, training life to the institutional one and lastly, the third, military life to the working life after discharge.

Recruitment only concerns the medical aspect for the individual is either physically and psychologically fit and thus recruited or he is not and thus discharged. The up-keep of a state of health is rather more difficult for it also concerns the non-medical aspect on which it is now necessary to draw the attention. It is no secret that the bearing pillars of military pathology may be summarised in three different parts: traumatic facts, infectious diseases, psychological unfitness.

On the basis of the above it is

now quite simple to spot out the strongpoints conditioning and guaranteeing the safeguard of the young recruits' health. On the one hand the improvement of the selective filter in its two expressions: recruitment-selection, incorporation; on the other hand the activation of all measures apt to:

- reduce, by environmental changes and by increasing individual resistance, the morbidity and deadliness of infective pathology;

- limit the incidence of traumatic forms by verifying the present training programmes, improving the qualification of the cadres and giving start to suitable initiatives in the field of ergonomics;

- limit juvenile disadjustment with military life giving an ever greater impulse and capillarity to strategies and structures designed to prevent the phenomenon.

As regards the first aspect mentioned above, there is no doubt that the functional improvement recruitment-selection must be seen as regards technology of means and as regards the cultural-scientific preparation of medical personnel.

training procedures, to a very accurate evaluation of their physical and psychologic conditions. Modern diagnostic equipment was employed as well as specialists in the various fields.

Hence the necessity, in this field too, of qualifying men, improving the organization, sophisticating means and equipment, effecting ergonomic controls to verify, where necessary, the psycho-aptitudinal fitness of the recruit for the task assigned him.

As regards prevention designed to reduce infectious diseases and traumatic pathology I believe it necessary to acknowledge that there are limits to this task and that we cannot expect a human organization to perform miracles which not even advanced countries with very high standards and economic possibilities are able to accomplish.

As regards infective pathology, we must underline what emerged from a detailed analysis, both epidemiologic and statistic carried out during the recent SANITEC International Medical Congress in Turin according to which the military community is at risk only as regards aerodiffused infectious diseases: as regards the other forms the situation differs slightly from that of the civilian community in the same age range.

Particular attention must be paid to meningitis and pulmonary tuberculosis.

Statistics as regards the former seem to indicate that in the period Autumn 1987-March 1988 there has been a net reduction of cases of meningitis in concomitance, chronologic at least, of the relative vaccination which became operational more or less at that same time. Of course, a cautious evaluation of the above and a detailed epidemiologic analysis is necessary, but the fact remains that the incidence of meningitis in the above mentioned period registered the lowest levels since 1981.

As immobilism in these fields, even if on favourable positions, is always harmful, the Army Medical



Service has started an initiative, being at present examined by the competent organisms of the General Staff, designed to enlarge the immunity spectrum of protection as regards meningitis by using vaccines having as antigens not only serumgroups A and C but also Y and W 135.

If the above is achieved within next September, we shall be able to state that our contingent may count on an immunitarian protection regarding 80-85% of cases of the meningococcus disease. In this respect we are far in advance as regards the civilian medical organization and achieve advanced policies of prevention as set down by the programmes of our General Staff and Defence Administration.

As regards tuberculosis and other aero-diffused infections problems appear more difficult as the chances of reducing the morbidity of such diseases are rather low in spite of the fact that all regulations of direct prophylaxis (vaccination, disinfection, isolation, etc.) are respected.

In fact, the most efficient strategies aimed at limiting the aerodiffused forms must consist, at pre-

sent, in interventions of an environmental type designed to eliminate housing problems as well as other infrastructural incongruities which, through overcrowded lodgings, facilitate the «growth of massive amounts of microbes and their diffusion among healthy individuals».

As regards traumatic pathology, prevention is, as is obvious, only partly of medical competence. This does not mean that the Military Health Service cannot be involved in this sector with its experiences and competence. Indeed, we wish to underline that we are ready to strengthen the relations of co-operation with all the other Bodies of the Armed Force within the initiatives already under way and hope that nuclei of officers, medical and not, expert in ergonomics and hygiene of work be established at the levels deemed suitable.

Today more than ever, the unrelinquishable binomial man-machine which is the basis of any operational programme, may no longer be organized on the basis of the old traditional ideas of development and management.

Within the modernisation of the Armed Forces and within the reorganisation of the Army Medical Service, the aspects connected to the adjustment of machines to men, so that men may work better and machines be more efficient, require that the most important interests and operational impulses be polarised on them.

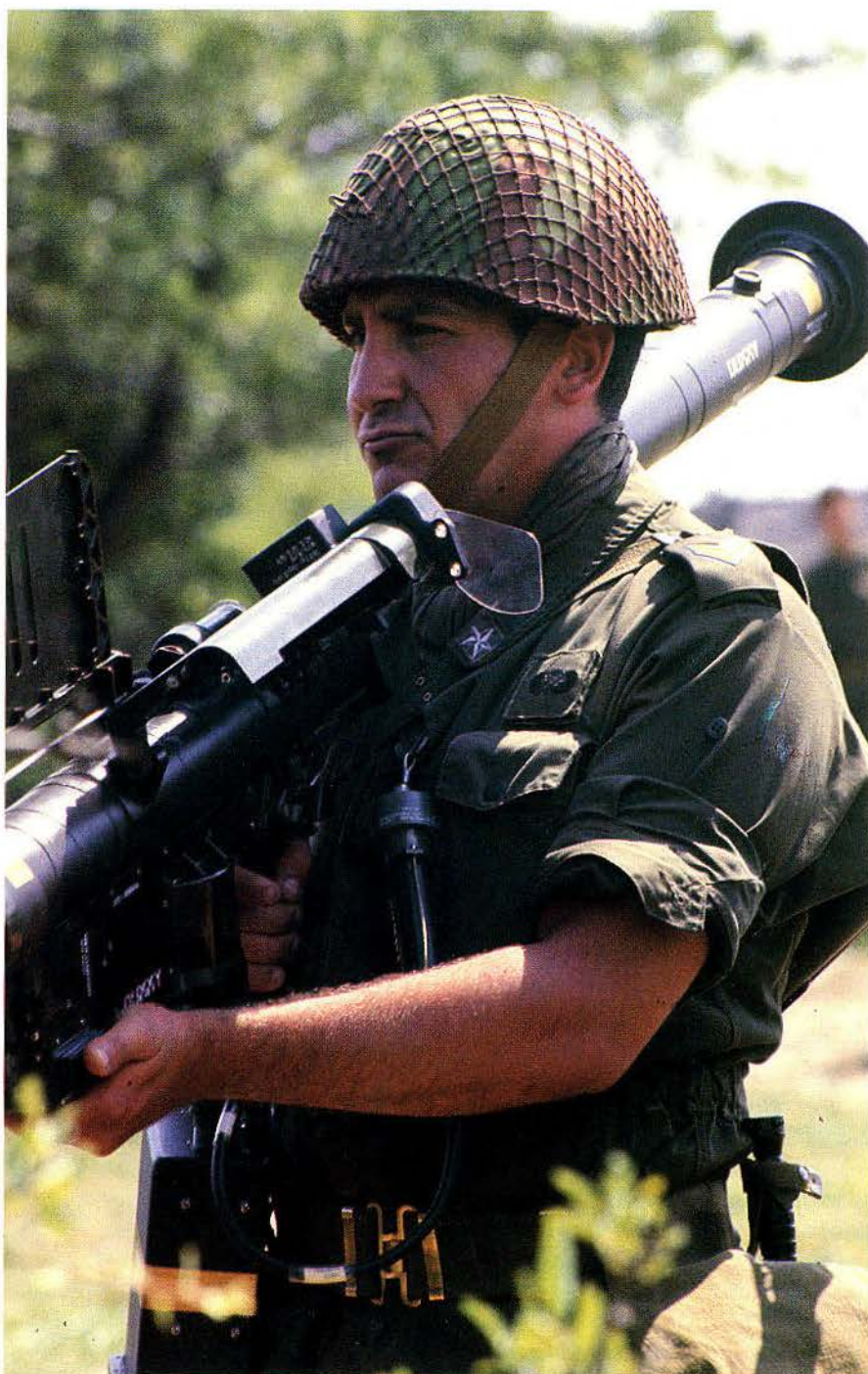
Lastly, as regards the third point, that is the one concerning the prevention of juvenile disadjustments within military life, the Army Medical Service concentrates its attentions on this delicate sector.

In 1980, experimentally, the first Psychological Advisory centre was established at the Military Hospital of Verona. The positive results obtained encouraged us to enlarge this activity and Psychological Advisory centres now exist throughout the national territory in every Military Medical centre.

As is known, medical officers specialised in psychiatrics or medical psychology operate in the above centres, assisted by civilian psychiatrists and psychologists: their prioritarian task is to give psychologic assistance to recruits with problems of disadjustments regarding military life, aimed at favouring if possible, a better integration in the units they belong to.

It must also be remembered that the prevention of psychic disturbance and of mental hygiene is also carried out at Army Corps, Military Region, Brigades, training School or Institute, and Regiment level by the Co-ordination of Psychologic Support Centres, established by the Director of the Medical Service, an Arm Officer and the Military Chaplain.

The capillarity for the prevention of psychic disorder within military life, just outlined above, indicates the engagement that Army General Staff and the Military Medical Service are committed to in the field. Not only are medical Officers and psychologists engaged in this activity; the contribution supplied by the cadres is deemed prioritarian.



Speaking of military psychology, I wish to mention that about two months ago the 12 Recruit Training Battalions have once more started the personalogic screening during the incorporation examination. This is a further organizational effort designed to improve the selection to avoid particularly fragile personalities from entering the military collectivity and increasing their disorders.

Of course, however, in a wider view of the above problems, each of us should meditate on the brilliant considerations which my friend and colleague, Prof. Andreoli stated during a meeting devoted to military Health: the change in the world of the young. I still remember his words, so deep was their effect: «I believe that everybody working with young people, realises how surprisingly rapid-

ly they change... Their adolescence becomes shorter as far as experience is concerned and longer as regards dependence, a dependence on conflicting patterns and on which depends, in part at least, the conflict between teen-agers and their families, nowadays particularly strong».

I make Prof. Andreoli's warning my own: all of us, medical officers and not, can no longer take up rigidly structured attitudes, but must flexibly and intelligently adjust ourselves to these metamorphoses.

Lastly, the Army Medical Service also follows with great attention the phenomenon of suicide within military life which, after an atypical increase in 1986, dropped to figures, extremely painful, but inferior to those of the corresponding age range in the civilian world. The average suicide rate among recruits in the period 1976-1986 was 4.2 for one hundred thousand individuals, while it was 4.7 in civilian life. The statistic curve, as stated in a well-informed report of the Administrative Department of Army Medical Service, «shows a slight steady increase from 1976 to 1982. After a slight lowering in 1983-84, the phenomenon increases again in 1985 and also 1986 shows an increase of the phenomenon in civilian life. In the Armed Forces the mortality rate for suicide increased, even if not steadily, and reached its peak in 1986».

Despite the above, the study of the single cases of suicide or attempted suicide is deemed very important for a more efficient prevention

well-knowing however, that an act of self-destruction cannot always be foreseen.

I realise that with the above I have not always been complete and exhaustive: many aspects would have deserved further analysis and study.

I cannot, however, end without mentioning the programme for the establishment of Military General hospitals which will operate in co-operation with the most advanced civilian health structures and cure a vast range of pathologies. In fact, the Military Hospital of Rome is already among the above and other medical centres such as the intensive coronary disease centre are already open to the civilian population too. So are the re-animation centre and dialysis department while a diagnostic centre is being established which will be supplied with T.A.C. and magnetic resonance.

The Military Hospital of Padua has also become a qualified hospital, both technically and functionally, while the hospital for long lasting diseases in Anzio is being improved and developed.

I wish, in conclusion, to underline that no plan and no policy may be seriously constructive if not based on verification and adjustment of the operational instrument. The impulse given by Army General Staff to Army Medical Service as regards means, structures and economic resources, will be sterile if the cadre of Medical officers will not be likewise enhanced, because only the health operator is able to use the above means so that the health of recruits be safeguarded and

the above mentioned improvements have a beneficial effect.

Guido Cucciniello



Medical Lieutenant General Guido Cucciniello was born in Avellino in 1926 and graduated in Medicine and Surgery at the University of Naples. He then specialised in Orthopedics and Traumatology, and legal and Insurance Medicine at the University of Genoa and in Kinesitherapy, Physiotherapy, Rehabilitation and Medical Gymnastics in Orthopedy at the University of Rome.

He worked for the Military Hospital in Milan and was appointed Director of the Medical Service of the Coronary Legion of Alessandria, Assistant Military at the Orthopedic Clinic of the University of Rome, in charge of the nucleus of Inspectors of the Headquarters of Army Health Corps, Head of Medical Services and Medical Director of the Central Military Region. At present he is Head of Medical Services and Chief of Army Health Corps.

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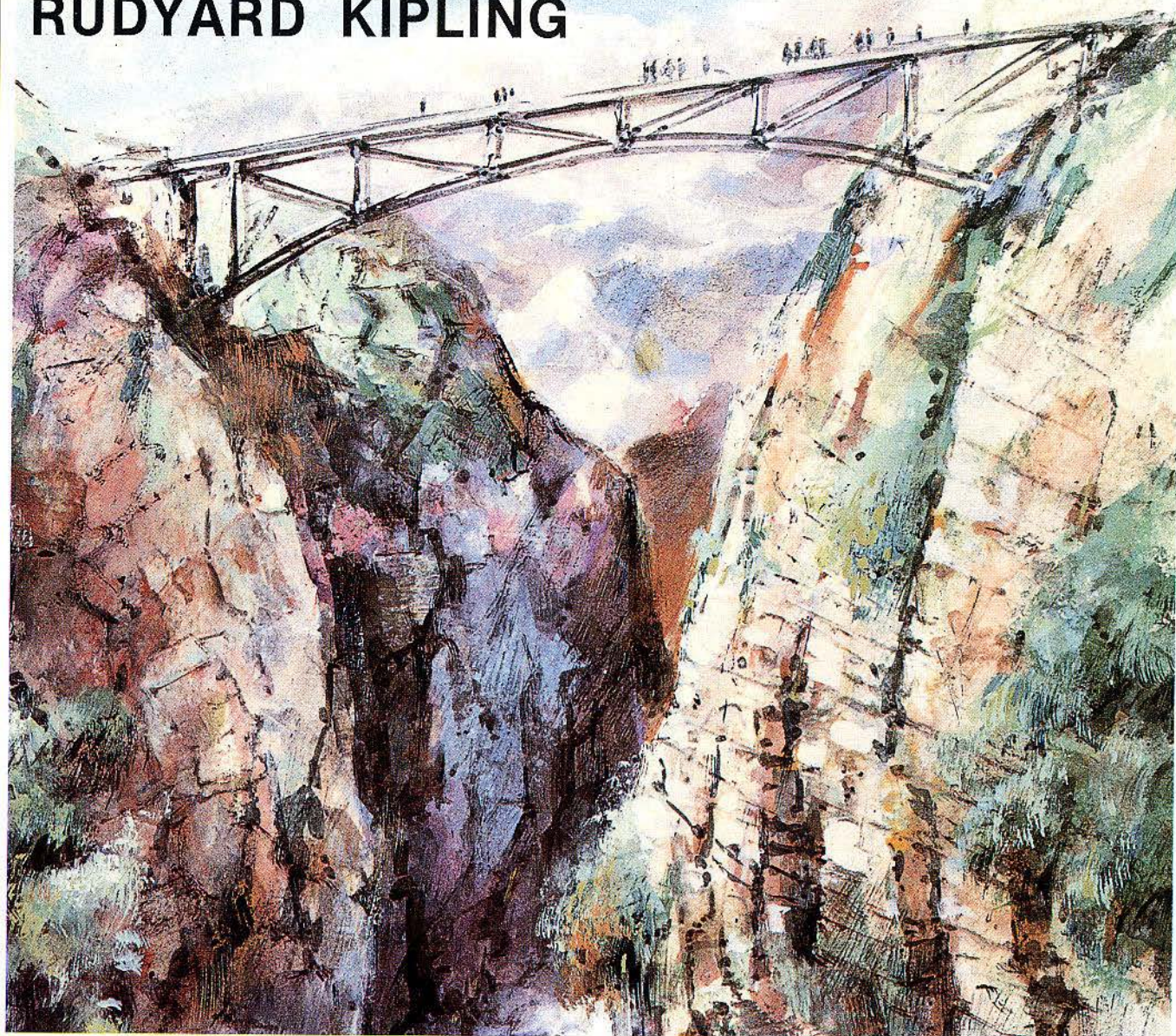
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RUDYARD KIPLING



The success achieved by the Italian edition of Rudyard Kipling's articles on the "Guerra nelle montagne" encouraged us to offer lovers of military literature the original English edition of the above. Starting from this issue of the English edition of Rivista Militare we will publish in succession the five articles by Kipling.

In fact, only a few specialists are aware of the fact that, in 1917, the "Greatest Poet of the Empire" was on the Italian front as special envoy for British and American daily newspapers.

With the considerable help of scholars, among whom we must mention Professor Peter Lewis, we have been able to cast some light on Kipling's visit to the front and the implicit and explicit motivations. Accompanied by the distinguished British journalist, Perceval Landon, Kipling reached Italy in May 1917.

About a month later he returned to

England where he published five articles on the Daily Telegraph and the New York Tribune under the following titles:

The Roads of an Army

Podgora

A Pass, a King and a Mountain

Only a Few Steps Higher up

The Trentino Front

Shortly afterwards, the articles were republished by Doubleday in the USA in an edition of five pamphlets (a limited issue of 50 sets). Since then the articles have only been reproduced in the rare and expensive Sussex and Burwash Editions of Kipling's works. The above as regards the English language.

As regards the Italian language, we find the five articles published in paper back form in Milan in 1917 by the Risorgimento Press. Moreover, two articles titled "I soldati della Montagna" and "Il ventre di pietra" were published in 1965 in an anthology of war stories.

On Kipling's visit to Italy there is also a thick correspondence with his wife which, uncensored as it was, contains accurate and detailed comment on the places he visited and the people he met.

We may state quite safely that Kipling did not come to Italy merely as a journalist. In fact, before going on to the front Kipling spent some time in Rome. His letters to his wife suggest that he had important contacts with the Catholic Church hierarchy and that he was one of the representatives of that informal diplomacy encouraged by the British Prime Minister Lloyd George and thus a link between Pope Benedict's peace proposals and the British Government.

We are thus extremely happy to cast some light on this little known period of Kipling's life and bring these articles to the knowledge of our readers.

IF...

If you can keep your head when all about you
Are losing theirs and blaming it on you,
If you can trust yourself when all men doubt you,
But make allowance for their doubting too;
If you can wait and not be tired by waiting,
Or being lied about, don't deal in lies,
Or being hated, don't give way to hating,
And yet don't look too good, nor talk too wise:

If you can dream — and not make dreams your master
If you can think — and not make thoughts your aim
If you can meet with Triumph and Disaster
And treat those two impostors just the same;
If you can bear to hear the truth you've spoken
Twisted by knaves to make a trap for fools,
Or watch the things you gave your life to, broken
And stoop and build 'em up with worn-out
tools:

If you can make one heap of all your winnings
And risk it on one turn of pitch-and-toss,
And lose, and start again at your beginnings
And never breathe a word about your loss;
If you can force your heart and nerve and sinew
To serve your turn long after they are gone,
And so hold on when there is nothing in you
Except the Will which says to them: 'Hold on!'

If you can talk with crowds and keep your virtue,
Or walk with Kings — nor lose the common touch,
If neither foes nor loving friends can hurt you,
If all men count with you, but none too much;
If you can fill the unforgiving minute
With sixty seconds' worth of distance run,
Yours is the Earth and everything that's in it,
And — which is more — you'll be a Man, my son!

RUDYARD KIPLING

THE WAR IN THE MOUNTAINS

by
RUDYARD KIPLING
1917



I THE ROADS OF AN ARMY

When one reached the great Venetian plain near Army Headquarters, the Italian fronts were explained with a clearness that made maps unnecessary.

'We have three fronts', said my informant. 'On the first, the 'Isonzo front, which is the road to Trieste, our troops can walk, though the walking is not good. On the second, the Trentino, to the north, where the enemy comes nearest to our plains, our troops must climb and mountaineer, you will see'.

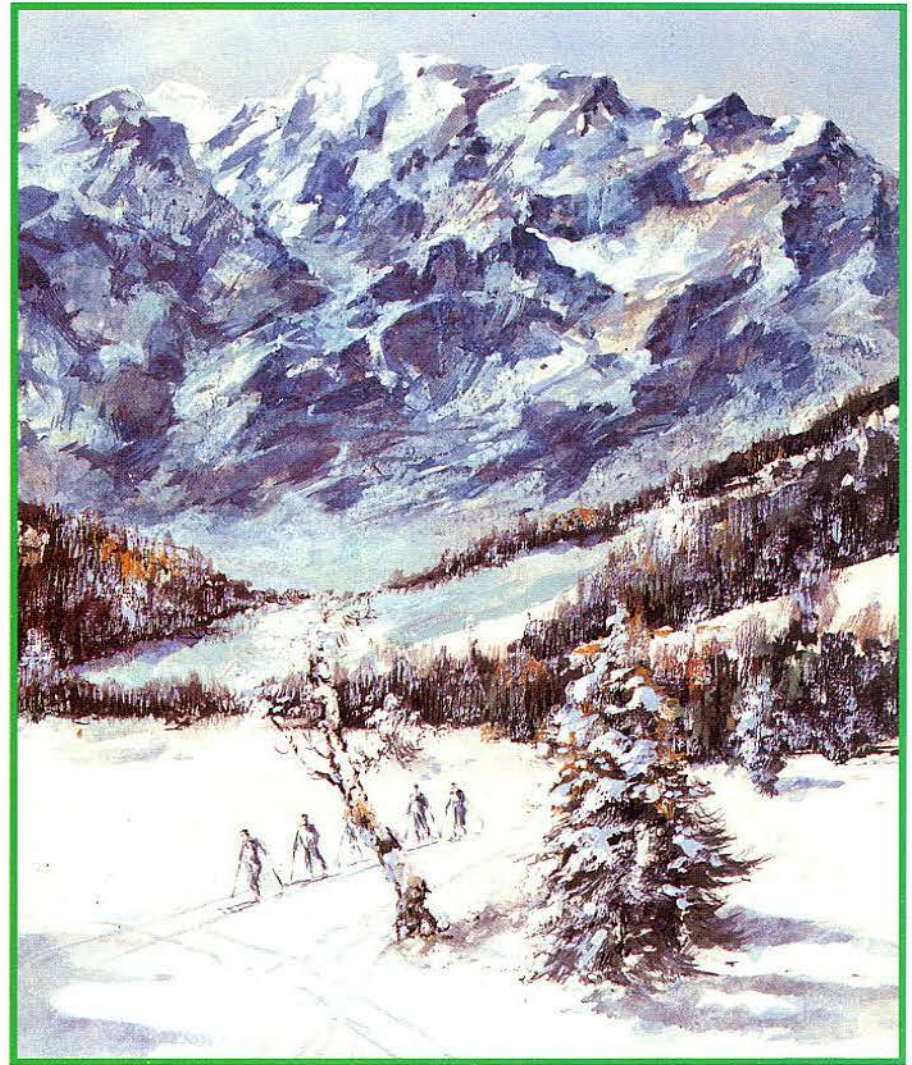
He pointed south-east and east across the heat haze to some evil-looking ridges a long way off where there was a sound of guns debating ponderously. 'That is the Carso, where we are going now', he said; then he turned north-east and north where nearer, higher mountains showed streaks of snow in their wrinkles.

'Those are the Julian Alps', he went on. 'Tolmino is behind them, north again. Where the snow is thicker — do you see? — are the Carnic Alps; we fight among them. Then to the west of them come the Dolomites, where tourists use to climb and write books. There we fight, also. The Dolomites join on to the Trentino and the Asiago Plateau, and there we fight. And from there we go round north till we meet the Swiss border. All mountains, you see'.

He picked up the peaks one after another with the ease of a man accustomed to pick up landmarks at any angle and any change of light. A stranger's eyes could make out nothing except one sheer rampart of brooding mountains — 'like giants at a hunting' — all along the northern horizon.

The glass split them into tangled cross-chains of worsted hillocks, hollow-flanked peaks cleft by black or grey ravines, stretches of no-coloured rock gashed and nicked with white, savage thumbnails of hard snow thrust up above cockscombs of splinters, and behind everything an agony of tortured crags against the farthest sky. Men must be borne or broke to the mountains to accept them easily. They are too full of their own personal devils.

The plains around Udine are better — the fat, flat plains crowded with crops — wheat and barley patches between trim vineyards, every vine with her best foot forwards and arms spread to welcome. Every field hedged with old, strictly



pollarded mulberry-trees for the silkworms, and every road flanked with flashing water-channels that talk pleasantly in the heart.

At each few score yards of road there was a neat square of limestone road-metal, with the water-channel led squarely round it. Each few hundred yards, an old man and a young boy worked together, the one with a long spade, the other with a tin pot at the end of a pole. The instant that any wear showed in the surface, the elder padded the hollow with a spoonful of metal, the youth sluiced it, and at once it was ready to bind down beneath the traffic as tight as an inner-tube patch.

There was curiously little traffic by our standards, but all there was moved very swiftly. The perfectly made and tended roads do most of the motor's work. Where there are no bumps there can be no strain, even under maximum loads. The lorries glide from railhead to their

destination, return, and are off again without overhaul or delay. On the simple principle that transportation is civilisation, the entire Italian campaign is built, and every stretch of every road proves it.

But on the French front Providence does not supply accommodating river-beds whence the beautiful self-binding stuff can be shovelled ready-made into little narrow-gauge trucks all over the landscape. Nor have we in France solid mountains where man has but to reach out his hand to all the stone of all the pyramids. Neither, anywhere, have we populations expert from birth at masonry. To parody Macaulay, what the axe is to the Canadian, what the bamboo is to the Malay, what the snow-block is to the Esquimaux, stone and cement is to the Italian, as I hope to show later.

They are a hard people habituated to handling hard stuffs, and, I should imagine, with a sense of property as keen



as the Frenchman's. The innumerable grey-green troops in the bright fields moved sympathetically among the crops and did not litter their surroundings with rubbish. They have their own pattern of steel helmet, which differs a little from ours, and gives them at a distance a look of Roman Legionnaires on a frieze of triumph. The infantry and, to a less extent, other arms are not recruited locally but generally, so that the men from all parts come to know each other, and losses are more evenly spread. But the size, physique, and, above all, the poise of the men struck one at every step. They seem more supple in their collective movements and less loaded down with haberdashery than either French or British troops. But the indescribable difference lay in their tread — the very fall of their feet and the manner in which they seemed to possess the ground they covered. Men whose life runs normally in the open own and are owned by their surroundings more naturally than those whom climate and trade keep housed through most of the year. Space, sunlight, and air, the procession of life under vivid skies, furnish the Italian with a great deal of his mental background, so when, as a soldier, he is bidden to sit down in the clean dust and be still as the

hours while the shells pass, he does so as naturally as an Englishman draws a chair to the fire.

The Belly of Stones

'And that is the Isonzo River', said the officer, when we reached the edge of the Udine plain. It might have come out from Kashmir with its broad weeps of pale shoals that tailed off downstream into dancing haze. The milky jade waters smelt of snow from the hills as they plucked the pontoon bridges moorings which were made to allow for many feet rise and fall. A snow-fed river is as untrustworthy as a drunkard.

The flavour of mules, burning fuels, and a procession of high-wheeled Sicilian carts, their panels painted with Biblical stories, added to the Eastern illusion. But the ridge on the far side of the river that looked so steep, and was in reality only a small flattish mound among mountains, resembled no land on earth. If the Matopos had married the Karroo they might have begotten some such abortion of stone-speckled, weather-hacked dirt. All along the base of it, indifferent to the thousands of troops around, to the scream

of mules, the cough of motors, the whirr of machinery and the jarring carts, lay in endless belts of cemeteries those Italian dead who had first made possible the way to the heights above.

'We brought them down and buried them after each fight', said the officer. 'There were many fights. Whole regiments lie there — and there — and there. Some of them died in the early days when we made war without roads, some of them died afterwards, when we had the roads but the Austrians had the guns. Some of them died at the last when we beat the Austrians. Look!

As the poet says, the battle is won by the men who fall. God knows how many mothers' sons sleep along the river before Gradisca in the shadow of the first ridge of the wicked Carso. They can hear their own indomitable people always blasting their way towards the east and Trieste. The valley of the Isonzo multiplies the roar of the heavy pieces around Gorizia and in the mountains to the north, and sometimes enemy aeroplanes scar and rip up their resting-places. They lie, as it were, in a giant smithy where the links of the new Italy are being welded under smoke and flame and heat — heat from the dry shoals of the river-bed before, and heat from the dry ridge behind them.

The road wrenched itself uphill among the dead trenches, through wire entanglements red-rusted on the ground — looking like 'harrows fit to reel men's bodies out like silk' — between the usual mounds of ruptured sand-bags, and round empty gun-pits softened at their angles by the passage of the seasons.

Trenches cannot be dug, any more than water can be found, on the Carso, for a spade's depth below the surface the unkindly stone turns to sullen rock, and everything must be drilled and blasted out. For the moment, because spring had been wet, the stones were greened over with false growth of weeds which wither utterly in the summer, leaving the rocks to glare and burn alone. As if all this savagery were not enough, the raw slopes and cusps of desolation were studded with numberless pits and water-sinks, some exquisitely designed by the Devil for machine-gun positions, others like small craters capable of holding eleven-inch howitzers, which opened at the bottom through rifts into dry caverns where regiments can hide — and be dug out.

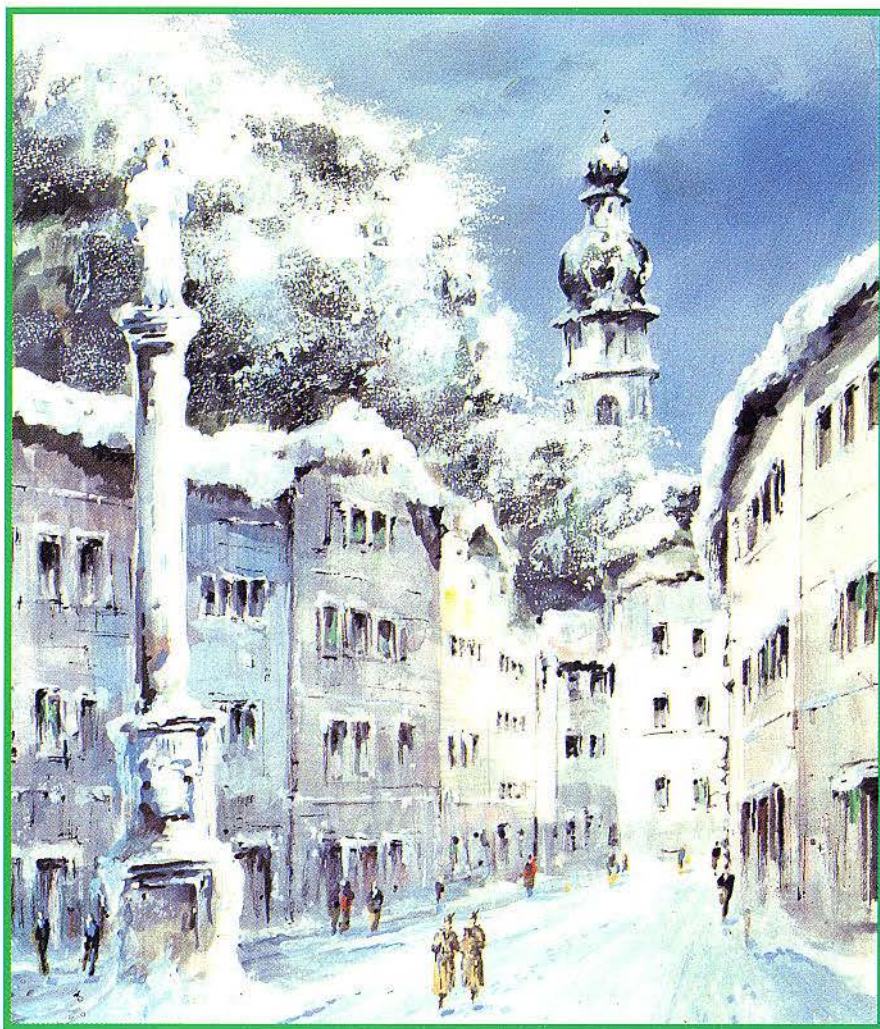
I saw one such place which had been used as a bombproof by a couple of Austrian battalions, not far from a forlorn little assembly of inside house-walls, all

silvery-grey, who leaned and whispered together in the thin air like gusts. There were what remained of a village often taken and retaken. The only thing with life in it was an engine pumping water through pipes up the hills and over the stone flats and beyond, across the far haze to the thirsty troops lying in waterless trenches. 'We had the Austrians full on the run here once', said the officer. 'The only thing that stopped us was want of water. Our men went on till they choked in the dust. Now these pipes go with them'.

We wound under the highest rise of the ridge and came out on its safest side, on to what the Arabs would call a belly of stones. There was no pretence of green — nothing but rock, broken and rebroken, as far as the eye could carry, by shell-fire, as though it were the far end of Lydd ranges. Earth, however battered, one can make some sort of shift to walk on, but here there was no more foothold than in a nightmare. No two splinters were the same size, and when a man stumbled on the edge of a shell-crater, its sides rolled down with the rattle of a dried tongue in the mouth. Great communal graves were heaped up and walled down their long sides with stone, and on one such stack of death's harvest some one had laid an old brown thighbone. The place shivered with ghosts in the hot daylight as the stones shivered in the heat. Dry, ragged points, like a cow's hips, rose along the ridge which we had overlooked. One of them only a few feet lower than we stood had been taken and lost six times. 'They cleared us out with machine-guns from where we are now', said the officer, 'so we had to capture this higher point first. It cost a good deal'.

He told us tales of regiments wiped out, reconstituted and wiped out anew, who achieved, at their third or fourth resurrection, what their ancestors had set out to win. He told us of enemy dead in multitudes put away somewhere beneath the ringing stones, and of a certain Austrian Honved division which by right of blood claim that this section of the Carso is specially theirs to defend. They, too, appear out of the rocks, perish, and are born again to be slain.

'If you come into this shell-hole — I don't think I should stand up too much — I'll try to show you what we want to do at our next push', the officer said. 'We're just getting ready for it' — and he explained with a keen forefinger how it was intended to work along certain hills that dominate certain roads which lead, at last, towards the head of the Adriatic



— one could see it, a patch of dull silver to the southward — under some dark, shadowy hills that covered Trieste itself.

A sun-warmed water-pipe crossed our shell-hole at about the height of one's chin, and the whirr of a distant shell. The officer's explanation was punctuated by the grumble of single big guns on the Italian side, ranging in anticipation of the serious work to come. Then the ground hiccupped a few yards in front of us, and stones — the poisonous edged stones of the Carso — whirled like partridges. 'Mines', said the officer serenely, while the civils automatically turned up their collars. 'They are working up the steep side of the ridge, but they might have warned us!'

The mines exploded in orderly line, and it being impossible to run away over the stones, one had to watch them with the lively consciousness that those scores of thousands of dead beneath and around and behind were watching too. A pneumatic drill chattered underground, as teeth chatter.

'I didn't know there were so many loose stones in the world', I said.

'They are not all loose. We wish they were. They're very solid, Come and see!'

Out of the ginning sunshine we walked into a great rock-cut gallery with rails running underfoot and men shovelling rubbish into trucks. Half-a-dozen embrasures gave light through thirty feet of rock. 'These are some of the new gun-positions', said the officer. 'For six-inch guns perhaps! Perhaps for eleven'.

'And how'd you get eleven-inch guns up here?' I asked.

He smiled a little — I learned the meaning of that smile up in the mountains later.

'By hand', said he, and turned to the engineer in charge to reprove him for exploding the mines without warning.

We came off the belly of stones, and when we were on the flat lands beyond the Isonzo again, looked back at it across its girdling line of cemetaries. It was the first obstacle Italy found at her own threshold, after she had forced the broad uneasy Isonzo, 'where troops can walk, though the walking is not good'. It seemed enough.

THE ALPINE



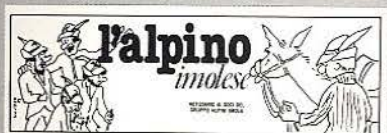
PRESS

THE NATIONAL ALPINI ASSOCIATION

Born in 1919 in Milan thanks to the initiative of a group of veterans of the Great War, the National Alpini Association (ANA), with more than 320,000 members, has a well-defined organisational structure (members flow into Groups, Groups into Sections, Sections into National Headquarters) and is based on a "hierarchical from that, beyond its democratic aspect, managed to put into the Association a kind of order, almost a discipline, allowing whoever has posts of responsibility, to carry out in a serene and familiar manner, a certain action of command..." (1). The ANA became known to the big public through numerous initiatives of solidarity among which the following may be quoted as example: the engagement in the reconstruction of Friuli and Basilicata after the earthquakes, the "Nikilajewka" School in Brescia, the anti-drug centres in Treviso and in Friuli, the centres for the disabled in Padova and Conegliano.

The Association also obtains from its members what in military terms may be defined a "rapid assembly": for the national assemblies (the conclusion of which is a parade lasting an average of eight hours) hundreds of thousands of discharged Alpini, many of whom accompanied by members of the family, in the space of a few days, flow into the city which has been chosen for the assembly.

Many may wonder what makes such a big mass of citizens face expenses and discomfort for the satisfaction of parading in line. And this in a Country which seems "disenchanted" from everything that looks military. Motivations are certainly multifarious and go from the wish to meet former colleagues who have not been heard of for a long time to that of having an occasion of seeing new places. At the base of all this, however, we may deem that there is an esprit de corps, a brotherhood and a solidarity, springing forth from common experiences in the alpini units and kept alive even after the end of the military service. This is also due to the active





presence of the ANA and to its channels of communication within and without the Association for which the Alpine press plays a salient role.

THE ALPINE PRESS

The Alpine newspapers are a communication channel which develops within the ANA and goes out through publications placed in meeting rooms of barracks of the Alpini units. The link between discharged citizens and citizens on active service strengthens the bonds already existing among personnel coming from the same territorial area — very often from the very same valley — making the esprit de corps stronger and giving a wider dimension to what is commonly called “tradition”.

Alpine publications, more than 80, are the information agency of the Groups and of the Sections, some of which abroad, and perform in a limited territorial contest. The press agency at national level is “L’Alpino”,

a monthly magazine with a circulation of about 350,000 copies and a public estimated in 1,000,000 readers of whom 300,000 are women (2).

This publication deals with very vast topics: articles on present problems of general interest, history, chronicles of events regarding the association, “reportages” on the most important drills carried out by the units of the 4th Army Corps as well as articles of a “military” nature which tackle problems regarding the Armed Forces in general and the Specialities in particular.

There have also been monographic works: in the historiographic sector “Storia delle Truppe Alpine” by General Emilio Faldella and in that of documentaries “Dal Fronte del Fiuli”, a volume which, besides proving ANA’s engagement in assisting the population and in the reconstruction after the 1976 earthquake, puts together the front page of all the dailies of that time. Recently some “Numeri Unici Fotografici” have been edited on

events concerning the life of the Association.

The publications of the Sections and of the Group face and go into the details of the most important events though they deal with “local” events.

This enormous quantity of printed paper, “cement of the life of the Association, offers members reasons for meditation and exchanges of opinion...” (3) and contributes in forming a correct view of the daily problems. It also supplies a clue to the chronicles, thoughts and ideas transmitted by mass-media.

Giuliano Perini writes on “L’Alpino” 3/85: “...each publication (by ANA, e.n.), even the least important, must feel the responsibility of giving an Alpine interpretation of the life and facts that take place in daily reality. And it cannot, indeed it must not, disappoint; it must not waste the opportunity of informing on the life of the Association, of giving a thought, a clue, an idea”.

As you may see from the above, the publishing activity of the National Alpini Association is not only the means through which information regarding Alpine issues reaches a vast public, but it also deals with subjects regarding defence and security and transmits this to those who would not usually pay much attention to these topics. The Alpine press may thus consider itself inserted in the vaster world of military publications, both for its “approach” and for other more complex reasons. Nowadays, in fact, mass-media, which represent the culture and the interests of the population, do not devote much space or attention to problems regarding the Nation’s defence (4). Moreover, when the Armed Forces try to project the military reality towards the outside they are faced with a kind of “will to be ill-informed”, as the average Italian seems to show some interest in the problems of defence only when he or his family is faced with the personal problem of compulsory military service.

However, it does not seem altogether right to attribute the lack of sensitivity towards problems of defence to the scarce attention paid by

information agencies and to the Italians' missing inclination towards "military" issues. Actually, the publications edited by agencies of the Armed Forces cannot as yet reach the big public with the necessary timeliness, even though they are now beginning to reach out beyond the contest of the "élites" working in the sector.

Those who do not work in the military field, however, are more exposed to a false interpretation of the news and risk assimilating it wrongly or incompletely, especially when it is put forth with scarce objectivity or with the intention of "distortion". In a situation of scarce information and lack of objectivity in the information itself, the prestige and credibility of the Armed Forces are the first victims. The Alpine press addresses a vast public, quite sensitive and attentive, and carries out, together with the activity of information of the Association, the job of circulating thoughts and culture and fills part of the information gap on problems of safety reaching out to environments where military publications are only now making their timid entrance.

For this reason and for its action of moral support to the Armed Forces, for its perseverance of traditions and its esprit de corps, it deserves respect and attention.

Lieutenant Colonel Claudio Magris

NOTES

- (1) Vincenzo Periz, "L'Alpino", January, 1986.
- (2) Information given on "L'Alpino", March, 1985.
- (3) Giuliano Perini, "L'Alpino", March, 1985.
- (4) Rivista Militare 3/84, "Gli Studi strategici e la pubblica opinione" and Rivista Militare 1/86, Claudio Magris, "La pubblicistica militare europea".

THE
ALPINE
PRESS





COLLECTORS' CARDS

COLLECTION TOY-SOLDIERS

The hobby of collecting things is an unconscious defence against the excessive levelling of tastes, preferences and habits imposed by today's life.

Even if the wish for peace is alive everywhere, the taste for the "uniform" is still widespread.

And this can be seen in fashion, in the minor arts and in the hobby of collecting.

A certain charme is exuded by helmets, caps and shakos, sabretaches and cross-belts; sabres, daggers and weapons; plates, gorgets and rifle-slings; medals, badges, collar badges and decorations.

The passion for toy-soldiers (or better still for historical statuettes) is a great one. In fact they are not considered as plain toys and they create an ever growing interest among people of all ages, belonging to different types of groups: from the collector to the artist, from the enthusiast to the historian, from the lover of war-games to the craftsman, from the antique dealer to the romantic. Hence, everyone can find in the "historical statuettes" something to satisfy his own personal taste. The most collected "historical statuettes", are those belonging to the period of the First Empire (in which uniforms are the most sumptuous), the American Civil War and the Second World War (with particular reference to the Wehrmacht soldiers).

Anyhow, as one can see from the

SOLDATINI

L'architetto Lucio Piazza colleziona soldatini in piombo prodotti da ditte inglesi ed italiane.

Le miniature sono rifinite a mano dal collezionista.

La collezione si compone delle seguenti serie:

— 24 pezzi di diverse altezze da 54 a 90 mm. relativi al periodo rinascimentale e napoleonico;

— 160 pezzi dell'altezza di 25 mm. relativi all'esercito di Lucca del 1320-'50;

— 132 pezzi dell'altezza di 25 mm. relativi all'esercito imperiale di Carlo V e interamente costruiti dal collezionista;

— 250 pezzi dell'altezza di 25 mm. relativi a guerrieri vichinghi;

— 148 pezzi dell'altezza di 25 mm. relativi all'esercito del ducato di Brunswick;

— 154 pezzi dell'altezza di 25 mm. relativi all'esercito inglese del 1815;

— 252 pezzi dell'altezza di 25 mm. relativi all'esercito russo del 1813;

— 246 pezzi dell'altezza di 25 mm. relativi all'esercito svedese.



1. Portabandiera dei Lanzichenecchi del 1525.

2. Esercito di Lucca del 1320-'50.

3. Gendarmi di Carlo V del 1525.

cards of some collectors of military articles, some enthusiasts have specialized in unusual topics such as samurai, ancient Egypt and the Middle Ages.

A BRIEF HISTORY

According to tradition, the history of military statuettes begins with 2 groups of painted, wooden soldiers, found in the tomb of prince

Card of collector Lucio Piazza.

Emsah, of the XII dynasty.

Centuries of "silence" divide the Emsah soldiers from the tin legionary found in Mainz and the two medieval knights also made of tin one of which is in the Cluny Museum.

The historical statuettes appeared only in 1600 and they represented a kind of society game.

The most famous toy-soldiers

SOLDATINI

Questa collezione, iniziata con produzioni in ceramica di mezzi militari navali ed aerei, si è specializzata negli anni successivi nel campo dei soldatini.

Oggi conta cinquemila miniature in plastica e mille in piombo di varie misure da 54 mm fino a 110 mm; alcune sono il prodotto di assemblaggio dei modelli predisposti, altre sono auto-costruite, comunque tutte sono state dipinte dal collezionista.

I soldatini in plastica si riferiscono a tutte le epoche, mentre quelli in piombo, indirizzo definitivo della collezione, hanno come limite storico il 1900 con preferenza per il medio evo e il periodo napoleonico.

La collezione comprende soldatini di tutto il mondo, tra i quali trovano posto dei modellini giapponesi dell'altezza di 90 mm curati nei più piccoli particolari.



Sir William Fitzralph 1320 (Cerimonial 90 mm).



Taisho (Hinchliffe 110 mm).



Volteggiatore Francese 1815 (Cerimonial 80 mm).



Grenadier Guards 1815 (Cerimonial 80 mm).



7th Middlessex (London Scottish) Volunteer Rifle Corp-Drumm Major Gardman 1897 (Real Model 90 mm).

Card of collector Pietro Lorenzo Semeraro.

were the ones which queen **Maria de Medici** had specially made in silver for her son, the future Louis XIII.

At the end of 1700, tin became more popular, sometimes used as an alloy with lead, copper and antimony.

With the creation of the national armies, an expression of popular strength, the armed corps became of

interest also to the man in the street (and to his sons). Casters and printers began to produce tin and paper toy-soldiers.

The paternity of tin toy-soldiers belongs to **Johann Gottfried Hilfert**, born in Coburg in 1732, who later moved to Nuremberg to become a caster. Nowadays the town still gives the name to the flat statuettes, with only 2 dimensions, held by a small base. Other artisans of the same kind were the **Heinrichsen** and **John**

Christian Algeyer who established the "golden rules" of the Nuremberg toy-soldiers: the height of the soldier on foot was to be 30 mm measured from the forehead to the feet, and 40 mm for the soldier on horse. The statuette was sold either "in white" (i.e. to be coloured) or painted, but always by the weight.

But even if the Nurembergs were suggestive, they appeared incomplete, therefore it was natural, for the Paris caster **Lucotte**, to build three-dimensional statuettes (in French known as *ronde-bosse*), very similar to the statuettes built in a lead and antimony alloy.

His competitors were the artisans **Cuberly**, **Blondel** and **Gerbeau** who from 1850 began to produce special boxes for collectors, with either four standing statuettes or one character on a horse (Napoleon, Murat, Turenne). On the boxes, stamped in gold, was the famous label C.B.G.

Even for the *ronde-bosse* there was an international size of 54 mm for the soldier on foot and 70 mm for that on horse back.

In 1893, the English artisan **Britain** invented an empty *ronde-bosse* soldier: this allowed for a higher and less expensive production but with lower quality, since the line joining the two parts of the mould was very plain to see.

Then there was a decline of fame for the military statuettes, which went through their hardest times between 1918 and the 50's. From 1950 onwards, there was a rebirth with the plastic statuettes created by **Heral Miniatures**, **Timpo** and **Crescent Toys**, still of the *ronde-bosse* type of 54 mm.

The first one to use plastic materials was the German **Hausser** (with the label *Elastoin* which is still famous today).

Among the "new" groups, there is the one of the extra-small soldiers, HO scale, about 1:86, i.e. between 18 and 20 mm.



MUSEO DELLA CIVILTÀ ROMANA

VITA E COSTUMI DEI ROMANI ANTICHI

-5-



A. Liberati - F. Silverio

Organizzazione militare: esercito

EDIZIONI QUASAR

A. Liberati - F. Silverio: "Organizzazione militare: esercito", published by Quasar, Rome, 1988, ps. 94, Lire 12,000.

The fifth number of the Collection "Vita e Costumi dei Romani Antichi" has just recently been printed. As already said (see R.M. No. 3, 1988) these books, sponsored by the Museo della Civiltà Romana, are designed to inform on the way of life of the ancient Romans in its various aspects. The book under reference titled "Organizzazione militare: esercito" has been published in view of the above.

The subject, hardly dealt with in the last ten years, has been matter for research and study by the authors who, starting from a critical analysis of ancient sources (Tito Livio, Polibio, Giulius Caesar, Flavio Giuseppe, Reanto Vegezio), have included in their work important testimonies taken from epigraphic documents and from the examination of historic surveys. The book, which is the result of an interdisciplinary research conducted on the double path of archeology and ancient military art, favours technical subjects though taking into account the didactical character of the work.

The subjects dealt with start with the analysis of the military organization within a period of time going from the origins of Rome to the late empire and consider the relative historic-political events.

Particular mention is made of the deve-

lopment of the most important combat unit of the Roman army: the Legion.

The various systems of deployment on the battlefield of this great basic unit: phalangitic in the royal period, manipular and cohortal in the republican period and during the principality and then again phalangitic during the middle and late empire. Parallely, the system of command in its different hierarchical components is also considered, with particular mention of those ranks and tasks which mostly symbolized the value of the entire military apparatus: centurions, military tribunes, ambassadors...

The book goes on to describe war machines, weapons and armours. Lacking reliable testimonies, the authors explain these subjects with several drawings of the various components (helmet, armour, uniforms...) with the observation of historic surveys (the Trajan column, the Arch of Constantine in Rome and or Galerio in Salonika, the freeze of the praetorians at the Louvre Museum...) and funerary stelae preserved in various museums throughout Europe.

Military engineering is dealt with in its various thematics, through the description of the camps, the fortified boundary system and urban fortification. Daily life is drawn out in another chapter describing decorations, punishments and other subjects such as medicine, nutrition.

Another result of the authors' research is the history, here compulsorily summarized, of 41 Legions of the Imperial age. Through a minute and patient historical reconstruction, almost a mosaic, we learn, for example, that the Legio V Alaudas, established by Caesar, owed its name to the fact that the legionaries were a plumed helmet. The feathers were of "alauda" (crested lark) and were considered the distinguishing mark. We are also told that the Legio XXI Rapax, at the end of the I century A.D. was defeated in battle by Sarmatians and Suebes and was never established again.

To integrate and complete the book we find the following: the reconstruction of the Silpia battle (the episode of Scipio's campaigns in Spain against the Carthaginians), which is important for the innovating use of the movement of maniples on the battlefield and an appendix on the military presence, in the Imperial age, of troops of "auxilia" (auxiliaries) in a province deemed of medium risk: Numidia. Iconographically speaking, the volume is enriched by several photographs such as

the modern reconstruction of war machines and many graphic documents. There are also several schemes of deployment of the Legion, a table indicating the range of the most common Roman launching weapons, a section of "vallum" and some reconstructions of colours and badges of the Legion.



F. Boneschi: "Cuore mio", published by Noi Publicisti, Rome, ps. 146, Lire 18,000.

The fourth edition of the lucky collection of poems by Francesco Boneschi, "Cuore mio", in which the author highlights moments of sublime lyric value has recently come out with the addition of about ten new poems.

At present deputy national secretary of the Federazione della Stampa, Boneschi, former winner of a Vallombrosa literary prize, began writing his first poems in Corsica in 1943 and in 1945 he published his first collection...

Among the most communicative, tightly bound to that period, we find "Corsica" and "Per la morte di un soldato", moving and sincere testimony of the war drawn up by a then twenty year old grenadier serving on the French island.

Moreover, the collection is accompanied by interesting photographs regarding times and places having a particular meaning for the Author according to whom the illustrated leaflet contained in his volume "pays homage to the shy lad who has lived and paid within me and for me with a sentiment of love the eternal cult of poetry, culture and truth".

Massimiliano Angelini



EDWARD N. LUTTWAK



RIZZOLI

E.N. Luttwak: "Strategia della Vittoria" (Strategy of Victory) published by Rizzoli, Milan, 1988, ps. 395, Lire 25,000

In this book Edward Luttwak, full professor of Strategy of the Center of Strategic and International Studies in Washington, as well as Advisor of the National Security Council, of the USA Department of Defence and the Department of State, draws out a particularly vivid picture of the great strategy of the 80's and 90'.

According to Luttwak, the world today is living a historic period in which the strategic era of the nuclear regime has come to an end, while a post-nuclear era in the relations between East and West is beginning.

The unsteadiness shown by the United States in the International field is, according to the Author, one of the main causes of the present fickleness of world policy.

In this respect, Luttwak mentions the two main changes undergone in the last years by the international position of the United States. A first period of crisis arose when radical cuts in the USA Armed Forces were added to the loss of military force due to the Vietnam conflict. This was accompanied by the maiming and paralysis of the security service and the discouragement of the political forces.

On the contrary, the Soviet Union was, at that same time, marked by continuity of government and by an unusually big increase in its military force.

Another period of crisis, according to the Author, may be spotted out when it seemed that the first and primary aim of foreign

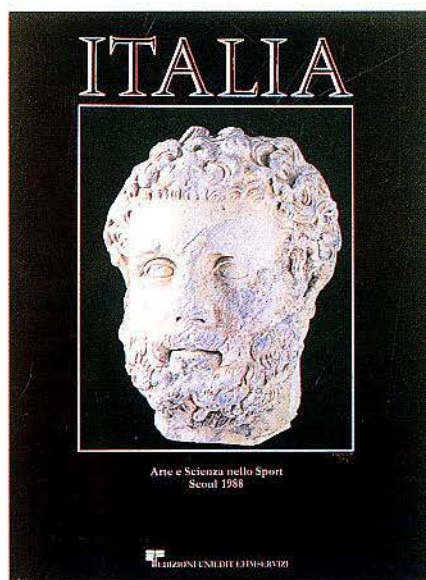
policy was to avoid, at all costs, the use of force without considering that the natural consequence of this was the weakening of the United States protection engagements as regards its allies. This attitude of "submission" brought the USA to suffer passively the affront at the hands of Iran which imprisoned USA diplomats and the successive attacks against American diplomats in Libya and Pakistan to the prejudice of the image the United States showed the world.

However, these moments of crisis were followed by a rather quick recovery, amplified on the international political scene by the fortuitous coincidence of the "degeneration" of the system of the Soviet government.

And now that the "Reagan rearmament" has reached its peak and in Moscow a new leading political class seems able to mend, if not reform, a system historically destined to wane, a further change is probably close, a turn which we hope will lead from disorder to stability.

Luttwak's book, which examines the most urgent issues regarding strategy and military policy, underlines the need for peace which, however, should not be illusory and must thus be armed and, by no means, must it be left to unlikely utopias: we must say no to time-serving illusions without, however, ever relinquishing hope.

Massimiliano Angelini



AA.VV.: "Italia - Arte e scienza nello Sport - Seoul 1988", published by

Unidite Efimservizi, Rome, 1988, ps. 127, Lire 10,000.

On the occasion of the Seul XXIV Olympic Games, an Italian exhibition titled "Art and Science in Sports" was held at the Korea National Museum.

The exhibition was promoted by the Foreign Office which, assisted by the Ministry for Culture and Environment, the National Research Council and C.O.N.I. (Italian Olympic Games Committee) and patronized by several Italian and Korean Bodies, achieved the interesting initiative and once again showed the world the ancient and ever fascinating image of Italian culture.

The following museums participated by sending several works of art: the Archeological Museums of Rome (Museo della Civiltà Romana, Museo Nazionale Romano, Antiquarium Comunale, Museo dei Gessi della Università degli Studi "La Sapienza"), of Florence (Museo Archeologico Nazionale, Museo di Casa Buonarroti, Leoncini collection), of Arezzo, Chiusi, Siena, Fiesole, Cagliari, Benevento, Naples and Milan (Museo della Scienza).

The exhibition avails itself of a rich catalogue which starts from the analysis of sports within ancient Italian populations and, through the Etruscans, reaches the Romans. For each athletic discipline there is a brief study of its characteristics during the Greek and Roman age.

For the Greek the practice of sports was an undiscussed feature of national unity, so much so that games formed one of the main elements of cohesion. In Rome, on the contrary, sports was never a binding element of state unity, as the latter was based on precise political and juridical organizations, but it was practiced with a view to develop the moral and physical formation of youths and within public performances. Tightly bound to the latter was the athletes professionalism.

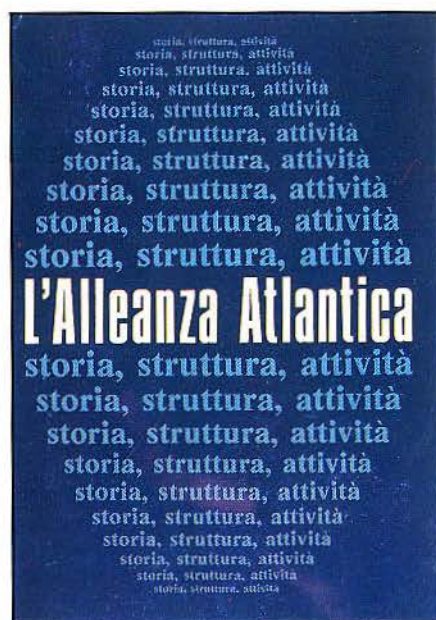
The main olympic games were the following: racing, over distances which varied from 190 to 4,500 metres: pentathlon (called quinquennium during the Roman age) which included racing, wrestling, discus throwing from 1,200 to 2,400 grammes; javelin throwing, for which the "amentum" was used to give more drive to the javelin; jumping, long and maybe triple; wrestling, pancratium, a combination of wrestling and boxing, and finally boxing itself. Moreover, bigae and quadrigae races on a distance of about 5-9

kilometres, were also considered olympic sports.

The gladiatorial game was considered an exclusively Roman "sport" to which originally only prisoners were admitted but which later saw the participation of free men, nobles and even emperors. The last gladiatorial match took place in the Colosseum in 404 A.D.

The places designed for the practice of sports were particularly stately, especially in Rome. Circuses, amphitheatres, stadiums, gymnasia and baths attained an exceptional architectural level if we think that the Circo Massimo contained up to 300,000 spectators.

Anna Maria Liberati Silverio



Servizio Informazioni della NATO: "L'Alleanza Atlantica: storia, struttura, attività", NATO Information Service, Bruxelles, 1983, ps. 404, s.i.p.

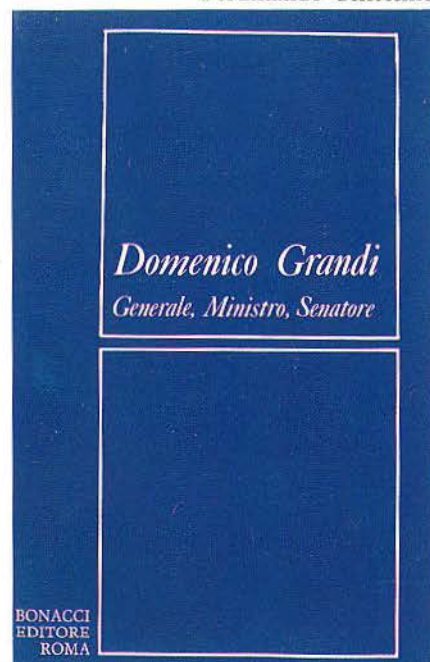
The North Atlantic Treaty Organization rose from a state of necessity: it is not just a simple means designed to find rapid and harmless solutions to difficult problems. It is a complex mechanism which has developed throughout the years and requires continuous attentions and improvements to carry out its task.

As regards armament control, the Alliance cannot voluntarily reduce its capacity of resisting an attack without tangible evidence of a reduced risk. If it relinquished its task of supplying an adequate defence it would not serve the cause of peace and would, on the contrary, encourage adventures.

Public opinion should not be left with doubts regarding the existing unbalance between the Western military power and that of the Warsaw Pact and the dangers connected with the gradual shifts of balance of the forces of the world. Alliance members must maintain their own defences and their own dissuasion potential on the same footing as their engagement in armament control and their effort to achieve détente. The two objectives are not contradictory, but mutually complete and strengthen each other. An authentic détente would reduce the need for dissuasion, while an efficacious dissuasion would counterbalance the limited significance of détente.

In this book the reader may learn how the Treaty works in practice and how it does its best to promote firmer international relations. A compact Alliance is, by itself, a means of dissuasion and may certainly be an advantage in the achievement of its aim: a lasting peace.

Ferdinando Schettino



"Domenico Grandi, Generale, Ministro, Senatore", Minutes of a Study Meeting on the 50th anniversary of his death, Published by Bonacci, Rome, 1988, ps. 174, Lire 20,000.

A year after the above meeting which took place at Corinaldo on the 50th anniversary of Domenico Grandi's death, the "Minutes" come out.

The fact that people who differ greatly in temperament and educational background have freely and objectively

discussed the human, military and political vicissitudes of Domenico Grandi through various testimonies, evaluations, hypotheses and interpretations must be greatly appreciated. From what was written and said during the meeting we may draw up an averse, pragmatic personality, estranged from all that is abstract and rhetoric: his negative opinion on the expansion policy in Africa, his being against Italy entering the war, his opposition to Fascism right from the very start, are the highest expressions of this personality and are, at the same time, the great lost battles of Domenico Grandi's life. One above all: neutrality. On September 23, 1914 he wrote to Antonio Salandra: «On the whole, the Army is not at present in the best possible conditions required to face a war campaign without concern...

...Whatever the result achieved, whatever the task events will entrust the Army, it is certain that it will, as usual, do its duty and it would do it even better if it felt itself sustained and accompanied by the Country's consent as our Army is the sincerest emanation of the Country...".

These words sound as hard as stone. Words which seem useless before the widespread interventionism. A fortnight later he resigned from War Minister. The battle was lost, but not for him alone. Did Italy and Europe win? Or did they commit suicide?

Every intervention in this meeting has contributed to underline different aspects, human as well, of the character of General Domenico Grandi to whom both military and political historiography has not paid the attention deserved. Anita Ginelli depicts Domenico Grandi through an attentive exegesis of the autobiographic notes he drew up for his family. Here we understand that this man, a public man, needed to leave a small testimony of himself to his family.

Massimo de Leonardi writes of Domenico Grandi the politician, the character engaged in the public life of the Nation.

Gian Nicola Amaretti highlights a particular period of Grandi's public life: the African mission, a mission which is proof of the deep interest of the leading class of the time in a Nation, Italy, which, in this field, was far behind the other European countries, in the problems of colonialism and territorial expansions. Much space has been given to the two most important periods of Grandi's public life: his activity as Minister of War during the Salandra cabinet and his work as military commander during the First World War.

Augusto Mastrofini



RIVISTA MILITARE

JOURNAL OF THE ITALIAN ARMY FOUNDED IN 1856



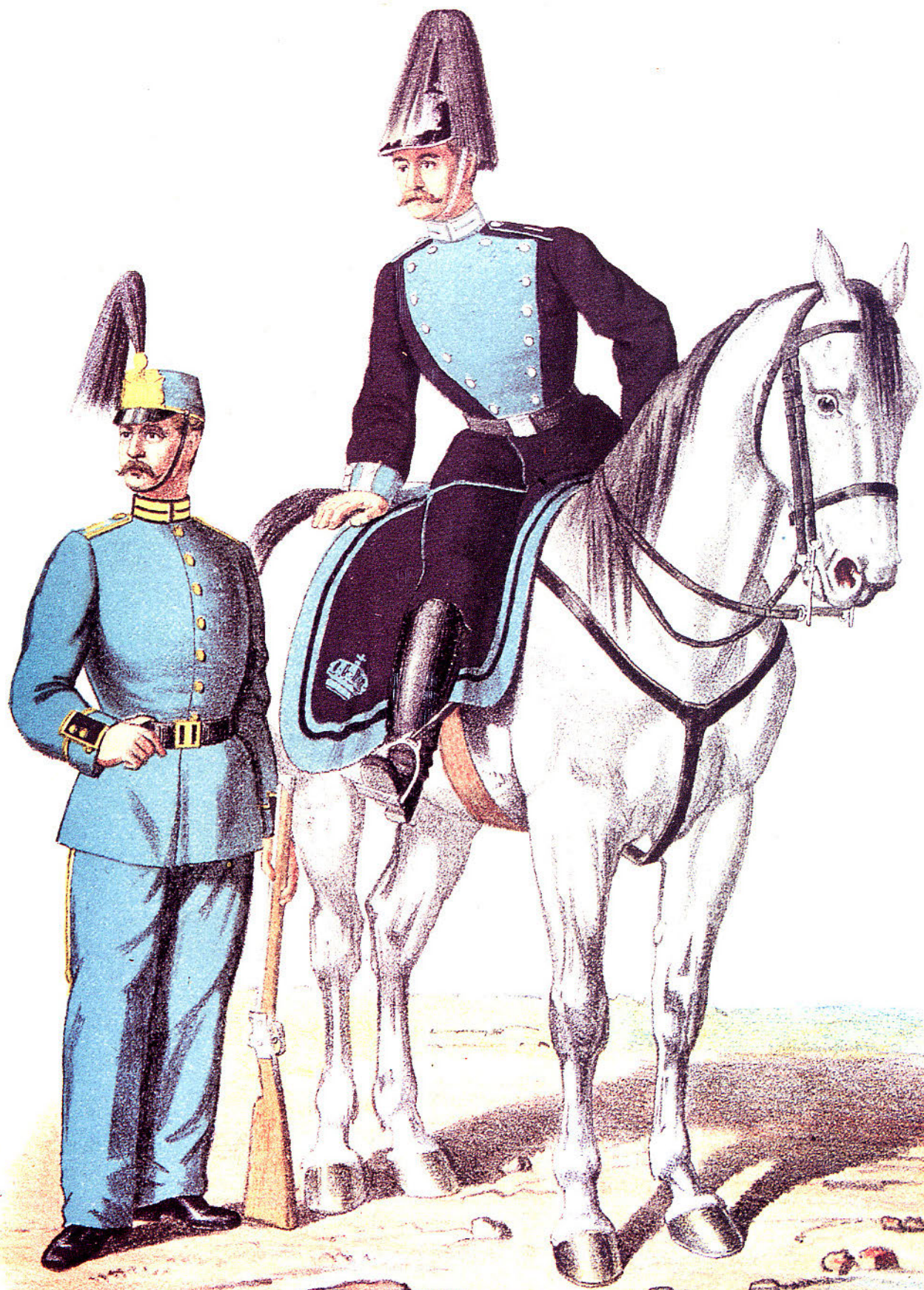
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★ **CIRO DI MARTINO**
Technology, man
and the problems
of defence in
the year 2000

★ **GAETANO BONICELLI**
The Church among
military men

★ **BENEDETTO ROCCA**
The employment
of Cossaks in
Italy





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Number two 1989
March-April

Rivista Militare aims at broadening and updating the technical and vocational training of Officers and NCOs. It is thus a means of propagating the military way of thinking and a forum of study and debate. Through the publication of articles of technical and scientific interest, Rivista Militare also aims at informing the general public on the Army and on military issues.

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Joint training of departments of member Countries of the Alliance combine to keep alive the spirit of co-operation which forms the basis of Nato.

BIMONTHLY

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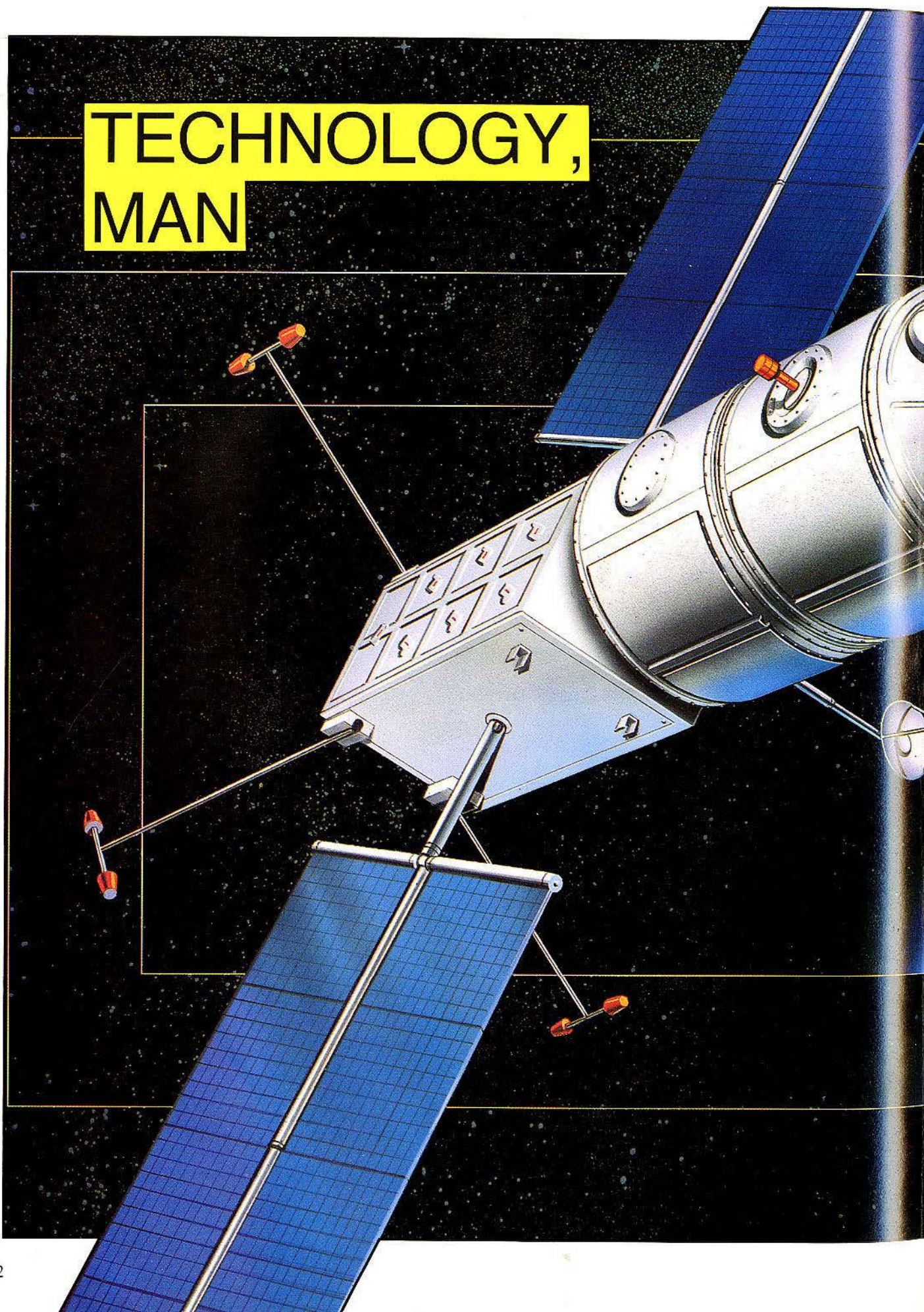
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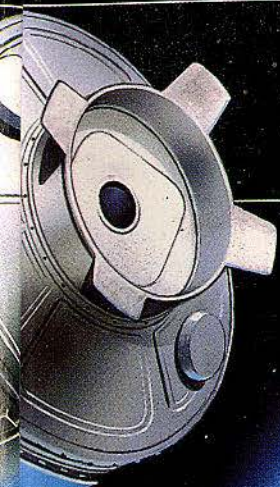
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TECHNOLOGY, MAN



AND THE PROBLEMS OF DEFENCE IN THE YEAR 2000



The tumultuous development of the technological progress and the even more futuristic prospects which can already be perceived, lead us to believe that the level of the available technologies should be considered as a fundamental power factor to which one should refer when planning and defining the military strategy of defence, and not only that.

If we were to define with a concise expression the present state of the East-West relations and confrontation, after having spoken in the past of an era of "cold war" and of "peaceful coexistence", we could now definitely speak of an era of "technological war" or, less dramatically, of "technological challenge".

As a matter of fact, today's reality indicates scientific research and technological innovations as the principal field where, in an updated picture of indirect strategy, the potentialities and capabilities of influence of the two blocs are weighed and compared.

If this is true for what concerns the global level of the challenge, it is equally true, and in a determining way, for the conventional armaments, this being a field which concerns each individual nation of the Atlantic Alliance.

Besides, NATO has always tried to make up for its quantitative inferiority, as compared to the conventional forces of the Warsaw Pact, by maintaining a certain technological superiority.

This basic choice was able both to contain within acceptable limits the imbalance existing in Europe and to derive from the military expenses a spin-off of economic productivity — and therefore social productivity — unknown to the Socialist countries.

On the other hand, the progressive increase of the expenses for research and the cost of armaments compel all NATO countries to retrench their forces, to a lesser or greater extent, in relation to the generation-leap of the main weapon systems.

It is the phenomenon labelled



On the threshold of the coming millennium it is man — or better still his conscience and his will — who gives rise to the most serious challenge. Western Europe has long overcome the stage of an economy of survival: in our society man has almost no «physical and moral rusticity» left and will have even less as time goes by.

“structural disarmament”, linked to the fact that the growing technological sophistication translates into an inverse proportionality of the quality/quantity ratio and therefore into a progressive replacement of men by machines; this trend is already widespread throughout the industrial and tertiary sectors.

The unbearable costs and the substitution of man will eventually lead to a science-fiction “push-button war” or, following successive re-

trenchments, to the introduction of very few, very expensive and highly sophisticated weapon systems which, due to their insufficient number, would be devoid of any operational significance.

This hypothesis is formulated by those who, on the basis of the current figures regarding the increase of the costs of a battle tank in its transition from one generation to the next foresee, not without reason, that around the middle of the next century an army will be able to af-

ford to have only a few of them.

Seriously speaking, the significant problem remains to attain the optimum balance between quality and quantity, based on the actual operational requirements, considering that, as in the perception of the world that surrounds us man is the measure of all things, so must the measure of the threat guide us in the organization of a credible military instrument. Hence the hope that the current moment of “détente” between the Superpowers will allow us to lower our guard and reduce the commitments, including the economic one, which are unavoidable at the moment.

Be that as it may, the West appears to be faced by a difficult choice: either maintain unaltered the minimum necessary number of conventional weapon systems abstaining (partially at least, given the growing costs) from keeping pace with the technological advancements, or try to preserve unchanged the overall operational capability of the military instruments, taking advantage of every option offered by the new technologies, optimizing as best as possible the employment of the weapon systems that are in shorter supply but are characterized by a higher performance.

Quietly, the West is already meeting this challenge, turning its attention to the sector traditionally considered more wanting in all the Armed Forces of the world: “Command, Coordination, Control, Information” (C3I). This is confirmed, as regards Italy, by the firm decision to start the “Integrated Field Transmission” programme (CATRIN).

But, in concomitance with these initiatives, to accelerate the times of this transformation two substantial impulses have come from the United States.

First: the proposal to develop “emerging technologies” within the framework of new operational doctrines (“Air Land Battle” — “Rogers Plan” — “Strike deep”, “FOFA”, etc.) which aim at optimizing operational effectiveness.

Second: the Strategic Defence Ini-

tiative (SDI) which, although promoting research in the field of "space weapons" intends to develop a large quantity of technologies which in the short or medium term will find full application in conventional armaments.

The research programmes activated by this group of initiatives and requirements are extremely varied and detailed.

Suffice it to mention:

- the technology of **optical fibres** which, having already made its appearance in the telephone field, could be applied also to air and sea navigation (optical fibre gyroscopes) or to antisubmarine (hydrophones) and anti-intrusion defence, through special sensors for the protection of ports and other areas of military interest;

- the **laser** — already employed in some sectors of medicine and about to represent in space the mythical "death ray" with an antimissile function — which will possibly find revolutionary applications in flight control and in navigation, as well as in perfecting the land combat vehicles and launchers;

- the so-called **smart munitions**, capable of tracking and hitting particular targets. Thus it will be possible to envisage, for instance, the development of systems capable of carrying out an effective defence — on both land and sea — against any threat, including cruise missiles, high-precision guided projectiles and air attacks.

In short, the current research activities will have important reflections not only on C3I systems, but also on a large number of conventional sectors of all three Services, which will thus be able to improve a great deal their operational effectiveness.

We have given a quick glance into a not-too-distant future, where the new technologies will delineate a battlefield completely different from any present or past example. Nevertheless we are already witnessing deep and irreversible changes, which have a considerable impact on the conduct of operations.



If on the one hand the problem of quality in view of the year 2000 leads us to believe that the technological challenge as regards armaments should have a well-defined cost limit, certainly, on the other hand the «human» factor must not be neglected since the employment of armaments and materials depends on man's will and determination.

In particular, I refer to:

- conditions of night combat and scarce visibility which today, thanks to the intensification of light and radiation devices, are very similar to those of combat in clear weather;
- ability to permanently see, locate and identify the enemy formations in depth (spy satellites, drones, etc.);
- possibility of delivering fire at a greater depth and with more precision than in the past;
- ability to bring not only fire,

but also combat, to the enemy rear lines, which have become more and more vulnerable;

- techniques of command, control and data display, with an appreciable reduction of the reception and processing times of information as well as of the issuing of orders.

Everything concurs in creating an environment where mobility, continuity of combat (by day and by night), command and control in real time, destruction power, are greatly emphasized, putting materials and



their user — **man** — in a constant condition of stress.

Therefore, if on the one hand the quality problem projected towards the year 2000 leads us to believe that the technological challenge in the field of armaments should find its definite limit in the costs which would require heavier and heavier — and less and less bearable — financial sacrifices from society, on the other hand one cannot ignore the “man” factor, on whose will and determination the employment of such armaments and materials depends.

It follows that in one way one should refuse the technological paroxysm which leads to accept innovations for innovation’s sake, independent of any significant “added value” in terms of efficacy within an acceptable cost-effectiveness ratio, and with the indispensable balance between economic management and global performance.

On the other hand, one should pay more attention to man: he, in fact, remains the protagonist of every scenario and his technical and spiritual education is equally — if not more — important than the availability of technologically advanced weapons and equipment.

On the threshold of the coming millennium it is precisely from man — or better, from his conscience and his will — that the most serious challenge stems.

Western Europe has long overcome the stage of the economy of survival: the man in our societies has very little, and will have less and less, “physical and moral rusticity”.

The education and training received as a youngster, as well as the facilitations of modern life, do not prepare him to face the oppressive and traumatizing situations of the future battlefield.

At the same time, this young man

will be familiar with the new technologies, particularly data processing and its multifarious applications, and will have, therefore, a greater inclination also for the employment of complex technologies.

Considering this, the selection of personnel will have to be very careful and the recruiting standards will probably have to take into account, besides the physical and intellectual qualities, also the qualities of character.

A future and hypothetical land combat will be in fact more and more fragmented and decentralized, and will require of the personnel a strong motivation, spirit of initiative, marked adaptability and physical endurance as well as an exceptional resistance to psychological fatigue.

Therefore, more than professional training, perhaps made easier by the young’s increasing habit to live symbiotically with technology, the spiritual preparation of the individual is going to need our utmost attention; a spiritual preparation which should translate into a staunch support of the institutions and the fundamental values that must be preserved and defended.

These are the problems that the future ruling classes, both civilian and military, will have to tackle and, from the efforts that the family, the school and the Institutions shall be able and shall want to make in order to create a more and more responsible and conscious citizen, will spring even more solid foundations for security, and therefore for development and peace.

Turning our look towards the year 2000 it can be said once more, and there is no denying it, that in the partnership man-machine the supremacy will always belong to man: there cannot be, in fact, any kind of technological progress that could compensate the possible psychological, moral and ideological faults of the fighter; of the man, that is, who must employ the weapons and the equipment in order to defend something in which he firmly believes.

Ciro Di Martino





NATO AFTER T



THE INF TREATY

NATO and European defence after the USA-USSR Treaty on the elimination of theatre missiles.

NATO's credibility, efficiency and prospects. These the subjects discussed during several meetings held at the NATO Headquarters near Diegem, in the suburbs of the Belgium capital and previously in Germany, France, Holland and Belgium. This study — conducted also on behalf of RAI and broadcast in four reports during the 8 o'clock News between 24 and 28 April — was no longer based on peace in security but rather on the security of peace.

The INF treaty suggests new strategical balances in consideration of the Warsaw Pact overwhelming conventional superiority. It is pointed out in NATO circles that the USSR's natural, basic, politico-military goal is the neutralization of the Atlantic Alliance. The tactics used consists of a proposal that has enticing psychological effects both on the various political circles and on public opinion: the elimination of the two opposing alliances. For Western Europe, the threat is implicit in the nature of the two political systems. NATO, in fact, is a voluntary alliance.

After following a tough policy for decades, the Kremlin has now radically changed its tactics and the first effects have already been felt. Relaxation of tensions, dialogue, the new Soviet diplomatic profile, the image of the new leadership and constant persuasive activities have strengthened the centrifugal tendencies in some NATO countries. When the potential threat weakens (even apparently) beyond a certain level, the cohesive force diminishes, solidarity links loosen, and uncertainties, anxiety and doubts arise. In this connection, the most recent sign has been given by Denmark, which objected to the presence in its ports of NATO ships armed with nuclear weapons. The evident wish of a number of Danes is the creation of a denuclearized area in northern Europe.

A Grumman E-2 Hawkeye returns on the aircraft-carrier after a mission



And it is here that the concept of the security of peace is based. Attempts at modifying the relations with the West have been noted in Moscow for some time. Within NATO it is pointed out that there is undoubtedly a certain good faith and determination to follow new paths on the part of the new leadership; reservations and caution are expressed on the strength of the new leadership vis-à-vis the opposition within the Soviet government; on the risk that this process may be suddenly stopped or reversed; on the need for more credible evidence and, above all, concrete steps towards a gradual conventional disarmament.

It is necessary to remember that **the threat is not only of a politico-military nature.** Increasingly lower defence spending, within the framework of a balanced disarmament in which the Warsaw Pact has taken a first significant step, is undoubtedly advisable and should be pursued on the basis of well defined and essential guarantees, among which verifications should have top

priority. And we should not forget that Europe cannot afford to renounce the political and military support of the United States. A common European defence is for the moment only a possibility: to become an efficient, effective, credible and operational reality it will need, first of all, a common political basis; therefore, many years shall have to elapse and, in any case, it could constitute only a valid element of the Atlantic defence, it could certainly not replace it. Nor should we forget that Europe has no defensive nuclear weapons.

NATO foresees that the disarmament process will last from twenty to thirty years. In the meantime, the existing organization will continue to guarantee the security of Europe.

On the scene of global strategy there is now, as a permanent and increasingly important element, **psychological warfare.** The Soviets are skillfully exploiting the proposed disarmament through a massive propaganda campaign, taking advantage of direct and indirect support.

Allied motorized patrol in action.

In the meantime, the United States is urging the Allied governments to increase their defence burden-sharing and, in this connection, we cannot ignore the American pressures for a gradual disengagement (or a reduced commitment) in Europe and for a sharp turn towards the Pacific, in order to reach trade agreements with China and other Asian countries, a huge market indeed, and to redress its trade balance with Japan.

On these prerequisites and general considerations, which should be evaluated on the basis of an extremely unsettled situation, rests NATO's essence. We asked General **Wolfgang Altenburg**, Chairman of NATO Military Committee, if the Alliance is still credible, if it represents a guarantee of peace or if now, in view of a possible disarmament, it might be considered obsolete. This is his answer:

"I do not think that NATO is obsolete, on the contrary, it has never



Operations on the deck of an aircraft carrier.

been so credible. It is extremely important that the NATO countries work out an arms control strategy enabling us to keep armaments at a lower level".

This reply suggested the following question:

"In the last forty years, has peace been ensured more by the deterrence of military instruments or by NATO solidarity and political cohesion?"

General Altenburg replied as follows:

"I believe that both factors are essential: first, a political stand and an alliance showing solidarity and accord, then a military structure, as a means for possible action. Therefore, the political idea is essential but also solidarity and military force are necessary to realize this idea".

General Altenburg's words clearly indicate that defence is crucial for our future security. Furthermore,

within NATO it is pointed out at responsible level, that if the conventional inferiority of the Western Alliance continues, we shall have to accept the idea of suffering a first strike.

An analysis, although limited to intents, cannot disregard three elements which, in any case, should be taken into account:

- the Warsaw Pact evident superiority in conventional armaments, with an overall ratio of 2.5-3 to 1;
- to dismantle the Atlantic Alliance's nuclear arsenal without renouncing security and in the presence of the current conventional force ratios, it is indispensable to strengthen the conventional forces;
- public opinion in NATO Europe must realize that, for the time being, the Warsaw Pact strategy has changed only for tactical reasons.

There are also other considerations. In the delicate relations between East and West, the scientific and technological aspects are

outstanding. Their repercussions on political orientations are not negligible. This is proved, were it necessary, by the many espionage actions recently discovered in Germany, Switzerland and France.

The press, with its sophisticated and powerful means, rarely dwells on this kind of news unless there are sensational and spectacular aspects, while it neglects or overlooks the more real, political, economic and industrial aspects which cause enormous damage. The success of an operation aimed at acquiring the plans of a new combat aircraft or a new surveillance radar is equivalent to save at least ten years' studies, research and tests and to fill, at no cost, the so-called technological gap, which conditions the political conduct. It is pointed out in NATO that the first important psychological battle in the duel of the high-technology nuclear systems was won by the Soviet Union when it convinced the Europeans to give up the neutron bomb, a weapon that the USSR did not

have at that time (second half of the seventies) and that now, instead, is part of its nuclear arsenal. In the West, according to NATO, there are two psychological factors which are apparently conflicting but, at the same time, strongly united:

- the fear of uncontrolled reactions on the part of public opinion, which is increasingly influenced by the pacifist propaganda of the new Soviet leadership;

- the lack of an international police capable of preventing wars and averting or opposing the different types of terrorism and subversion.

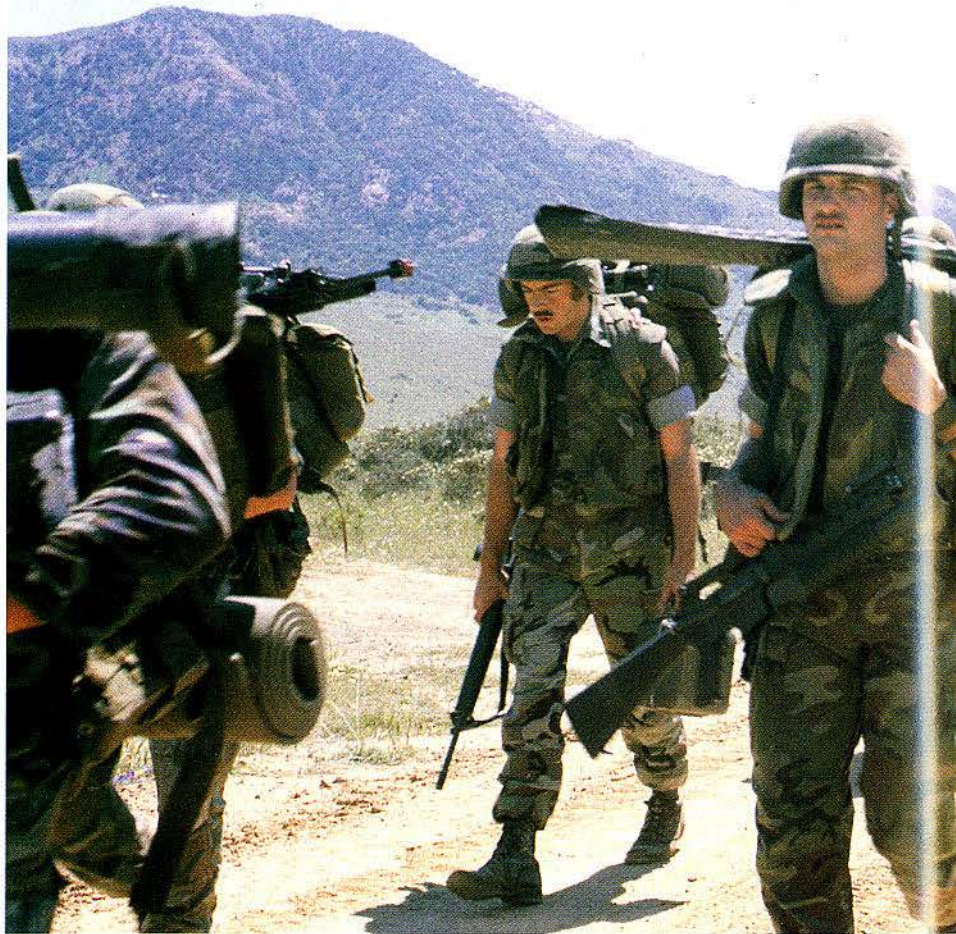
Moreover, it is pointed out that the destabilizing effects cannot be felt and evaluated immediately. Their danger can be sensed, but only with time it is possible to see those changes in the orientations and decisions which imply and determine choices.

From this viewpoint, the West is vulnerable and essentially exposed. This is the price of freedom and democracy, but since this system provides no guarantees, except for the great constitutional principles, it is almost impossible to identify the spaces where barriers which are essential for the defence of democracy should be erected. The depth of these spaces depends essentially on the extremely unstable political balances, which can be easily influenced.

As concerns the relations among NATO countries, we asked General Altenburg **whether in Europe there is more cohesion among the military or among politicians.** Here is his answer:

"This is an alliance of sixteen sovereign nations, an alliance reaching the other side of the Atlantic. I believe that we are all fully interested in the maintenance of peace and freedom.

Of course, in realizing our ideas we may sometimes have conflicting opinions, but this does not mean that there is no solidarity, just the opposite. It is precisely the possibility of expressing different opinions which indicates



that the allies are sovereign countries. As concerns the military aspect, as Chairman of a Military Committee of sixteen nations, I have the opportunity to witness every day remarkable manifestations of solidarity on the part of all".

As for the current and future role of Italy and her Armed Forces within the Alliance, the Chairman of the Military Committee said:

"Since the establishment of this Alliance, Italy has always been a very reliable partner. In this connection, her importance as a stabilizing factor in the Mediterranean is essential. I have been in Italy many times and I think that Italy is indispensable for the defence of the Alliance".

In this context, it is necessary to remember that Italy's contribution to the Alliance amounts to 8% but her strategic role is far greater.

It is also appropriate to point out psychological and political factors as

well as the still missing initiatives. Among the latter it is noted in NATO that a more courageous information on the realities in which the civilian society lives, works and develops is essential. First of all, there should be a greater awareness of what is being done to ensure the security of peace. It would be far more cost-effective to devote a portion of the resources currently allocated to defence to non-military initiatives; however, we must objectively realize that the global situation does not yet allow it and there are still risks, also and above all on account of the difficult dialogue between the two superpowers on nuclear strategical disarmament. The difficulties encountered in the U.S. Congress for the ratification of the INF Treaty, and those concerning controls, as regards the intercontinental ballistic missiles discussed in the new USA-USSR negotiations,



reconfirm the need for negotiating firmly without, however, renouncing the concept of a strong defence and deterrence. Apart from choices, we must acknowledge the obscure work of all the members of the Armed Forces of the various Western countries, who ensure our security and peace.

One of the questions which should be discussed more openly is the problem of chemical weapons. As for the production of these weapons, the Warsaw Pact is in the van, both qualitatively and quantitatively, and is ready for this type of conflict, which is more dangerous than a nuclear war. Many western countries are afraid to discuss this subject, even at politico-strategical level. Some nations, such as France, Great Britain, Holland, Belgium and even Switzerland, are more aware, and are modernizing. Among the accepted criteria, there is adequate in-

formation, to make people realize that not even potential risks must be underestimated, since security depends essentially on the defensive capability and, therefore, on an effective response.

Strategical confrontation involves also a duel of capabilities, intentions, risks as well as the determination to face those risks and to assume responsibility for them.

It has been ascertained that a feigned recourse to chemical warfare on the part of the Warsaw Pact would reduce by 50% the initial operational defensive capabilities of many allied armies.

Finally, we must consider our complex relations with the United States. The Americans point out that in the last 25-30 years Western Europe (W. Germany, above all) has become a great economic power under the strategic protection of the United States. Faced with the need

to increase her commitment to common defence the FRG seems to have difficulties tackling the issue of the defensive-deterrent nuclear weapons indispensable in a situation of evident and unquestionable conventional superiority of the Warsaw Pact. However, the German government cannot agree on the deployment of defensive tactical nuclear weapons on its territory without implicitly accepting to consider its soil as a potential battlefield, a concept that has always been rejected by West Germans.

Furthermore, the recent espionage cases have revealed that the Kremlin has always known in advance all orientations and decisions of the German government, and indirectly of NATO, for the last twenty years at least. And no one can reasonably affirm that the flow of information from the FRG to the East has been stopped.

Disarmament negotiations and a new image yes, within certain limits, but without renouncing the guarantees of the constant, penetrating and effective offensive of a mighty intelligence service, the most powerful and organized ever.

These are facts whose risks and implications we must realistically accept, while continuing our work without illusions and easy enthusiasm, and waiting for a profound and verifiable transformation.

Piero Baroni

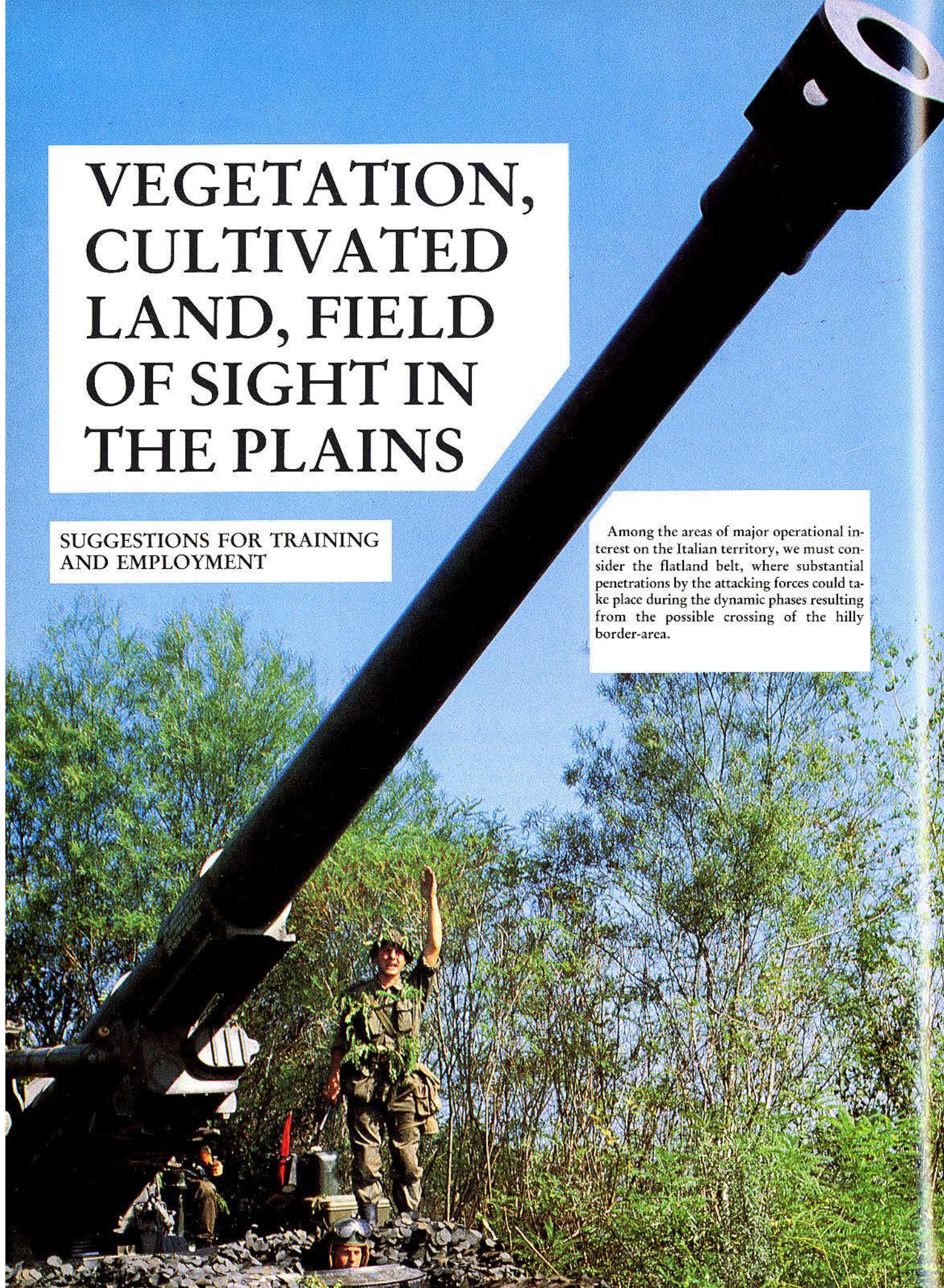
Piero Baroni, a professional journalist and member of the editorial staff of the RAI News Service, is a free-lance contributor to the History Office of the Army General Staff.

NATO AFTER THE INF TREATY

VEGETATION, CULTIVATED LAND, FIELD OF SIGHT IN THE PLAINS

SUGGESTIONS FOR TRAINING
AND EMPLOYMENT

Among the areas of major operational interest on the Italian territory, we must consider the flatland belt, where substantial penetrations by the attacking forces could take place during the dynamic phases resulting from the possible crossing of the hilly border-area.



As is known, most of this land, although furrowed by some waterways (which may constitute significant obstacles) and dotted with small villages, can be crossed by tracked vehicles. (Fig. 1)

Its peculiarities are the total lack of even low hills and, above all, the many cultivated fields and a lot of vegetation (vineyards, maize fields, hedges etc.) **limiting almost everywhere the depth of the field of sight** to a few hundred metres, or even less, according to the season.

The impossibility of exercising troops and equipment on this kind of land — which, as we said before, is extensively cultivated — has led some units to seek for training concepts ensuring a deeper study of procedures more adequate to this particular environment.

In this context, after many "conduct" and "on the spot" exercises, which were not fully exhaustive because the relevant evaluations and consequent decisions could not be tested on the field, the recourse to **two-sided exercises on relief maps**, according to a very simplified war game pattern limited to small units only, enabled us to collect a number

of data and to learn lessons that we consider extremely interesting. Here is the description of the exercise and the relevant comments.

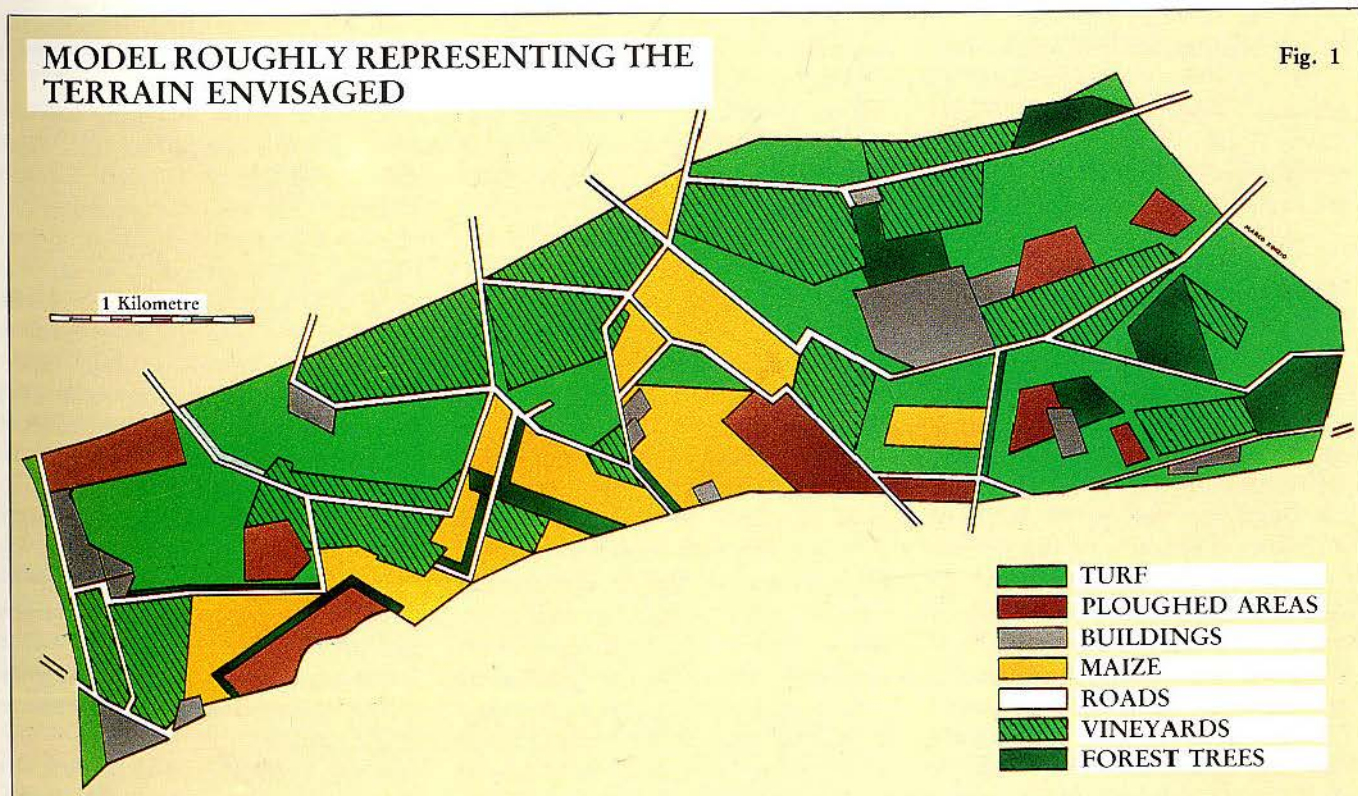
THE ATTACK

The attacker (an armoured combat group whose task was to proceed as fast as possible in depth) was faced with the impossibility of "seeing" at a distance and collecting satisfactory information on the situation and deployment of the defence before making contact. Hence, the need to proceed rather "gropingly", deciding to act according to the features of the terrain rather than on a real knowledge of the enemy situation. **Close reconnaissance** also was **scarcely effective**, since it was subject to repeated fire actions always conducted from different positions and causing considerable losses. Therefore **artillery and mortar fire**, equally constrained by the inadequate observation (the defender, among other things, had protected himself by destroying all bell towers), was **almost exclusively interdiction fire**, with direct actions

on targets where the enemy was only presumably located. The dispersal of the defender's vehicles and the fact that the personnel remained on their armoured vehicles until the imminence of the encounter considerably limited both the effects of fire and the enemy losses.

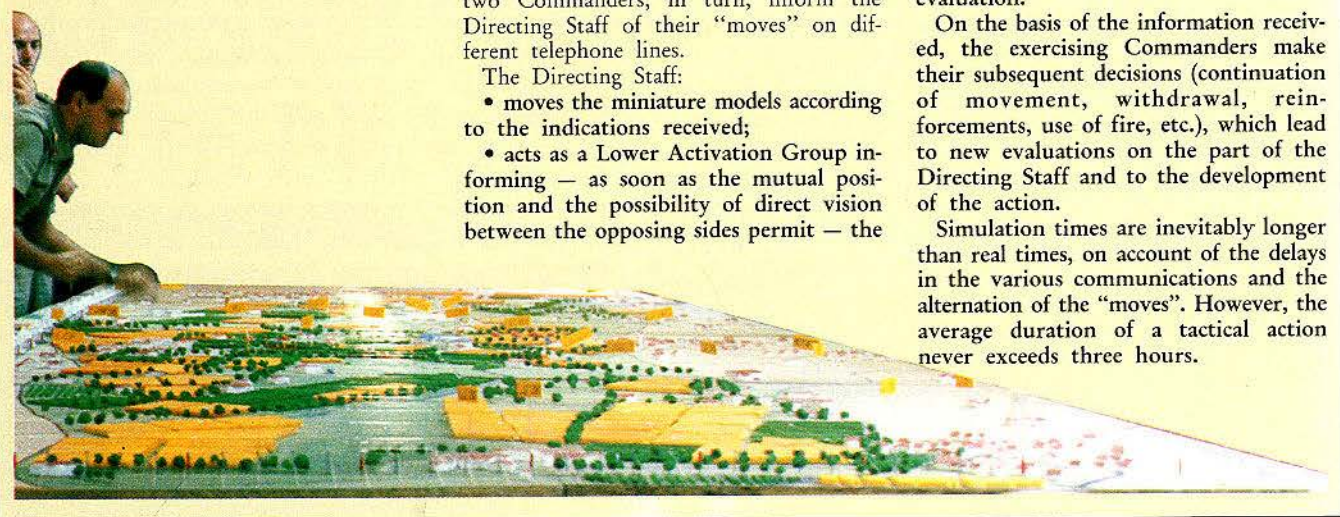
However, some more significant results were obtained through concentrations of fire on the buildings that, due to their size and position, could be better utilized by the defence as observation posts or antitank missile emplacements.

After adopting an initial formation covering the whole front, once contact had been established, the realization of strong concentrations (for instance: a column of armoured companies with platoons in line) on limited stretches was particularly effective. Taking for granted the loss of the forward forces, the subsequent "waves" actually succeeded in storming the defenders on many occasions and, under the cover of vegetation, in realizing immediate and deep penetrations that the defence which was also operating mostly "in the dark", could not always counter in time.



PLAN OF A TWO-SIDED EXERCISE ON A RELIEF MAP

After choosing a stretch of land representing an average sample of the environment considered, a large scale relief map is realized utilizing also aerial photographs; in the model all the details (vegetation, inhabited areas, etc.) are reproduced, permitting an immediate evaluation of the depth of the fields of sight.



On the contrary, the decision of having **the mechanized component** conduct the operation **on foot** was **scarcely rewarding** because the slower pace of the action almost always enabled the defender to disengage without losses.

THE DEFENCE

The defenders (a small mechanized unit tasked with wearing and possibly stopping the advancing enemy by operating in depth for 4-5 km) **could not control the assigned front by means of antitank missiles**, on account of the reduced fields of fire. It followed that the **antitank had to rely, above all, on the short-range weapons** of the rifle platoons, having recourse to mobile tank-hunter deployments. Due to the presence of vegetation, these deployments had to be almost always arranged in a line and side

On this model the Directing Staff locates, in compliance with the orders issued by the exercising Commanders following an initial illustration of the situation, the miniature models of all the vehicles of the two units as well as the appropriate symbols of the antitank weapons and mine obstacles.

The Commanders of the two sides and their respective Command Posts are in premises different from that of the relief map and avail themselves of a sufficiently enlarged map of the terrain, so that they can mark on it the location of their own means, as well as the enemy's, when they are informed about them.

The exercise is conducted by reports; the two Commanders, in turn, inform the Directing Staff of their "moves" on different telephone lines.

The Directing Staff:

- moves the miniature models according to the indications received;
- acts as a Lower Activation Group informing — as soon as the mutual position and the possibility of direct vision between the opposing sides permit — the

presence and the attitude of the enemy;

- acts as an Umpire establishing, after the appropriate evaluations, the outcome of each action.

Artillery and mortar fire is represented by transparent discs of the same size as the selected "typical targets" placed on the relief map by the Directing Staff, in the area where the exercising Commander indicates that the action has been conducted.

The Directing Staff:

- evaluates the losses of the units included in the area covered by the disc;
- gives the relevant information;
- takes them into account in the evaluation.

On the basis of the information received, the exercising Commanders make their subsequent decisions (continuation of movement, withdrawal, reinforcements, use of fire, etc.), which lead to new evaluations on the part of the Directing Staff and to the development of the action.

Simulation times are inevitably longer than real times, on account of the delays in the various communications and the alternation of the "moves". However, the average duration of a tactical action never exceeds three hours.

by side, without gaps (as a rule, a squad every ten metres) to avoid infiltrations in the intervals, susceptible of permitting (it actually happened sometimes) the irruption of armoured units, even up to company level.

Being impossible to ensure the control of the free spaces in a different way, the need to fill the whole front imposed a reduction of the sector assigned to the mechanized complex, even though its three forward rifle platoons were deployed at a distance of no more than 1,000-1,200 metres.

As concerns the action of the individual rifle squads, it was deemed appropriate to deploy the combat vehicles under cover, in rear positions — even a few metres — with respect to the weapon emplacements which had already been prepared along the edge of the various fields and were to be manned only on the imminence of the action. Staying as

long as possible in their vehicles, the men had a more effective protection from the artillery fire.

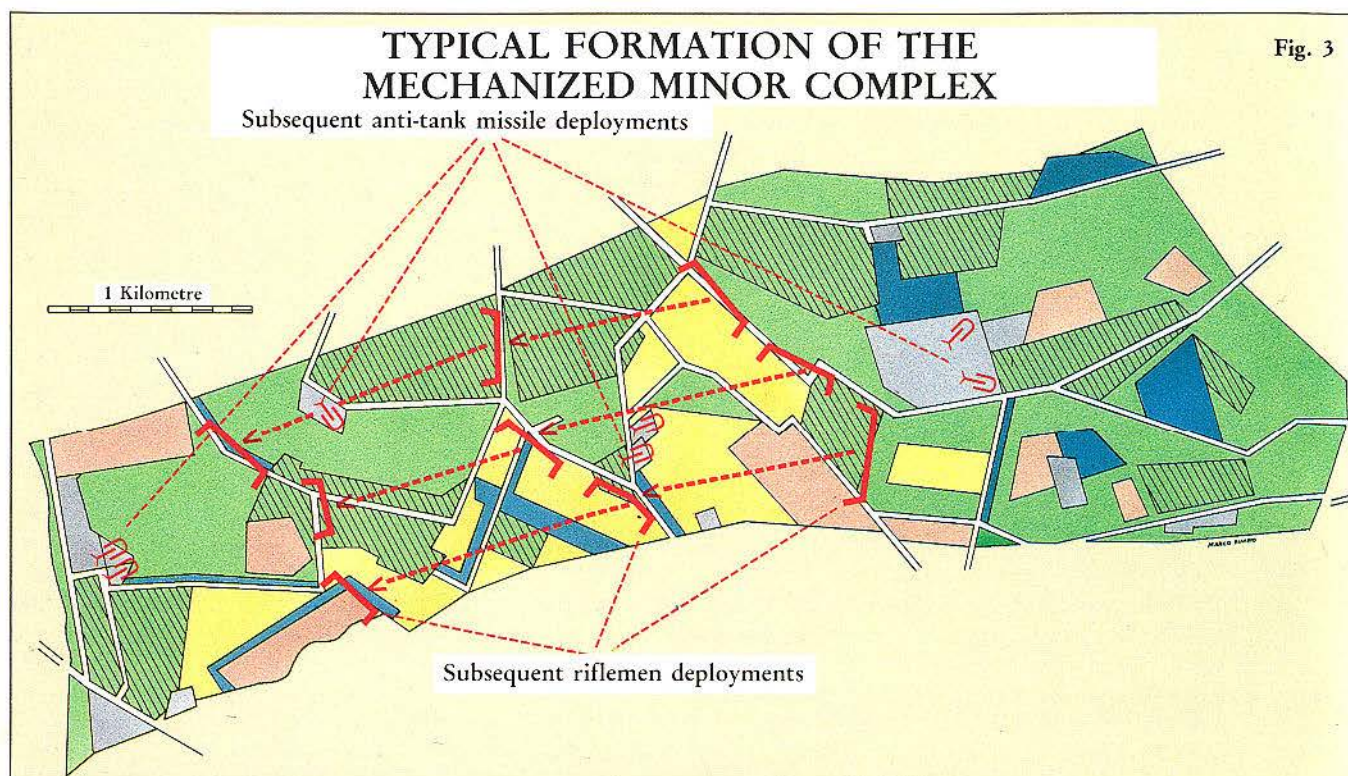
As soon as the attacking armour were in the open, at the short distance imposed by the limited visibility, the surprise antitank fire of all weapons in a position to participate in the action (Fig. 2) was very effective against the closest vehicles. The subsequent immediate return of the squads to their respective combat vehicles, for withdrawal to a backward alignment, **almost always enabled the defenders to avoid being swept away** by the attacking formations or being a target for the artillery, on positions by then identified by the enemy.

Although real minefields were not laid, the validity of scattering some mines on the terrain was confirmed, to further delay the progression of the attack.

In this context, the choice of the deployment locations was essential-

TYPICAL FORMATION OF THE MECHANIZED MINOR COMPLEX

Fig. 3



Short-distance encounters become necessary due to the very nature of the terrain. In the photo: Panzerfaust 3 short range anti-tank rocket launcher.

ing for a long time. This solution, if adopted, would ensure a good self-sufficiency of the squad for at least two subsequent deployments, with the possibility of eliminating 4-5 armoured vehicles, thus imposing on the attacker a considerable attrition rate.

In principle, it is estimated that the result of the outlined encounters could lead, in the depth considered, to the exhaustion of the mutual operational capability of the two opposing units (attacking armoured combat group; defending mechanized minor complex). This is an element that, in principle, should be considered acceptable.

On the contrary, there are still many uncertainties in the issue of **coordination**, deriving, above all, from the impossibility on the part of minor commanders to control visually their platoons, squads or even individual weapons. In fact, the practical difficulties to be expected could not be fully evaluated by having only recourse to simulation on a relief map.

Right

Apilas anti-tank rocket launcher

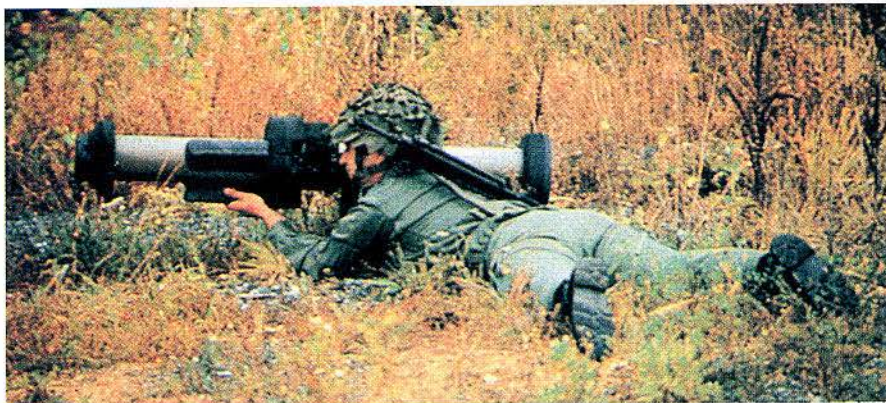
Below

A VCC moves out of sight covered by the vegetation

The terrain, lacking distinctive features, the course of roads and small waterways often different from the routes of withdrawal, the difficulty to define reference lines which are easy to identify, are all elements susceptible of seriously affecting the conduct of such a dynamic defence, requiring a close integration of the various components (riflemen, antitank missiles, tanks, artillery and mortar observers, minelaying etc.). Hence the need of a **preliminary accurate organization of the assigned sector** on the part of the defender (detailed reconnaissance of the various deployments and routes of withdrawal, set-up of obstacles, definition of the respective sectors, linkup points etc.). All this seems to be in contrast with the marked fluency and rapidity of the basic conduct.

Essentially, we should become familiar with procedures that, far from being improvised, must be based on a specific training, on the awareness of the many problems to solve and on repeated tests to be conducted not only on relief maps but also in training activities (even, for instance, with wheeled vehicles only). Finally, it should be borne in mind that not all the aspects of the problem have been dealt with in this article. In fact, even repeated and accurate simulations have their limit in that **they cannot consider the human component**, a factor that is very important, especially in close combat.

If, on the one hand, it is very difficult that a tank company continues to proceed expeditiously after losing half of two thirds of its vehicles in a number of ambushes (in this connection, mention is made of **virtual attrition** which should be carefully considered, in addition to the mere calculation of the losses), on the other hand, it is very difficult for the rifle platoons to face the enemy vehicles at a short distance, hit



them, return to their combat vehicles, get away under the pressure of other incoming vehicles, reorganize the forces remaining after the inevitable losses, and redeploy to a new position to reiterate the same type of action after a short time.

In this respect, it seems that the only alternative is to improve the training, making the lower cadres more aware of the difficulties to overcome, and preparing the troops to operate in this particular environment which might be determinant for operational purposes.

In fact, some outstanding phases of the action (engagement of the enemy at a short distance and subse-

quent withdrawal) can be split up and reproduced during the training cycle, at squad and platoon level, even in small areas, having recourse to fire simulators (MILES): concrete, even if not very spectacular results should not be lacking.

But, above all, it is necessary to acquire a specific mentality and be convinced that more static types of defence — although easier to carry out — are destined to have a limited success on the terrain and with the forces considered above.

Maj. Gen. Mario Buscemi

VEGETATION, CULTIVATED LAND, FIELDS OF SIGHT IN THE PLAINS

COMMAND AND CONTROL



Volume IV of publication 900/A "Report on the employment of Major Units - Command and Control", is the last of the basic volumes of the doctrinal series and the second of series 900/A, after the distribution of the publication on "Defensive Operations" which was revised following the elimination of the division level. The second and the third volumes dealing with "Offensive Operations" and "Logistics", respectively, are being revised.

The volume on "Command and Control" is the result of intensive studies and tests conducted in recent years in collaboration with the War College, Inspectorates and Local High Commands in order to realize, within the Major Units, a command and control organization in line with the current operational requirements.

At first, these tests concerned essentially Division and Brigade Headquarters, whose combat organization in **Main Command Post**, **Tactical Command Post** and **Rear Zone Command** had been established by Circular no. 60/163.30 of 1978.

Practical experience, however, had not given fully satisfactory results under the aspects of assignment of tasks, collaboration of some key elements and employment of personnel and means whose cost, although reduced with respect to the past, was still too high.

Hence, the advisability of modifying the outlined command structure, while continuing to adhere to the following guiding principles which were still considered valid:

- **shorter response times**, to ensure rapid decisions vis-à-vis the fast pace of the operations;
- **reliability of the system**, to guarantee the functional continuity of command;
- **mobility**, to prevent the capability, on the part of the enemy, of target acquisition and action, also in depth.

Therefore, a new organization (Circ. no. 1789/101.30 of 1984) was outlined, with the following main features:

- **at Army Corps level**: two Command Posts, the MAIN tasked with conducting, above all, tactical activities and the REAR mainly concerned with logistics; however, the possibility of mutual replacement, was maintained, if necessary, through the presence of special logistical bodies and tactical organs in the MAIN and the REAR, respectively;

- **at Elementary Major Unit**: only one Command Post, divided into two sections (main and alternate). The main section was based on the Operations Center. In addition to the organs indirectly involved in the operational activity, the alternate section included off duty personnel as well as reserve equipment, which would constitute a "replacement cell".

This organization was tested during Command Post Exercises with essentially favourable results.

Thus, the Army Staff decided to adopt it with a few improvements suggested by experience, initiating the preparation of volume IV of the series 900/A, "Command and Control".

VOLUME IV OF PUBLICATION 900/A

The volume outlines a command and control organization which, already in peacetime, meets battlefield requirements and, consequently, can react timely to unforeseeable situations and continue to work even in case of serious operational difficulties.

Considering that the prerequisite

for the efficiency of this organization is represented by an active and convinced participation of all its components, this publication intends to be a practical guide for Commanders and Staffs to accomplish their command and control function correctly without, however, compelling them to follow rigid procedures.

To this end, guiding principles and structures as well as their general functions, necessary for planning and carrying out the various activities, have been specified therein, together with the basic documents necessary for procedural support.

The publication contains some copies of the documents more frequently used in connection with Staff and Major Unit activities, and it takes into account the requirements for the future realization of an automated command and control system, although relying on the possibilities of the structures presently available.

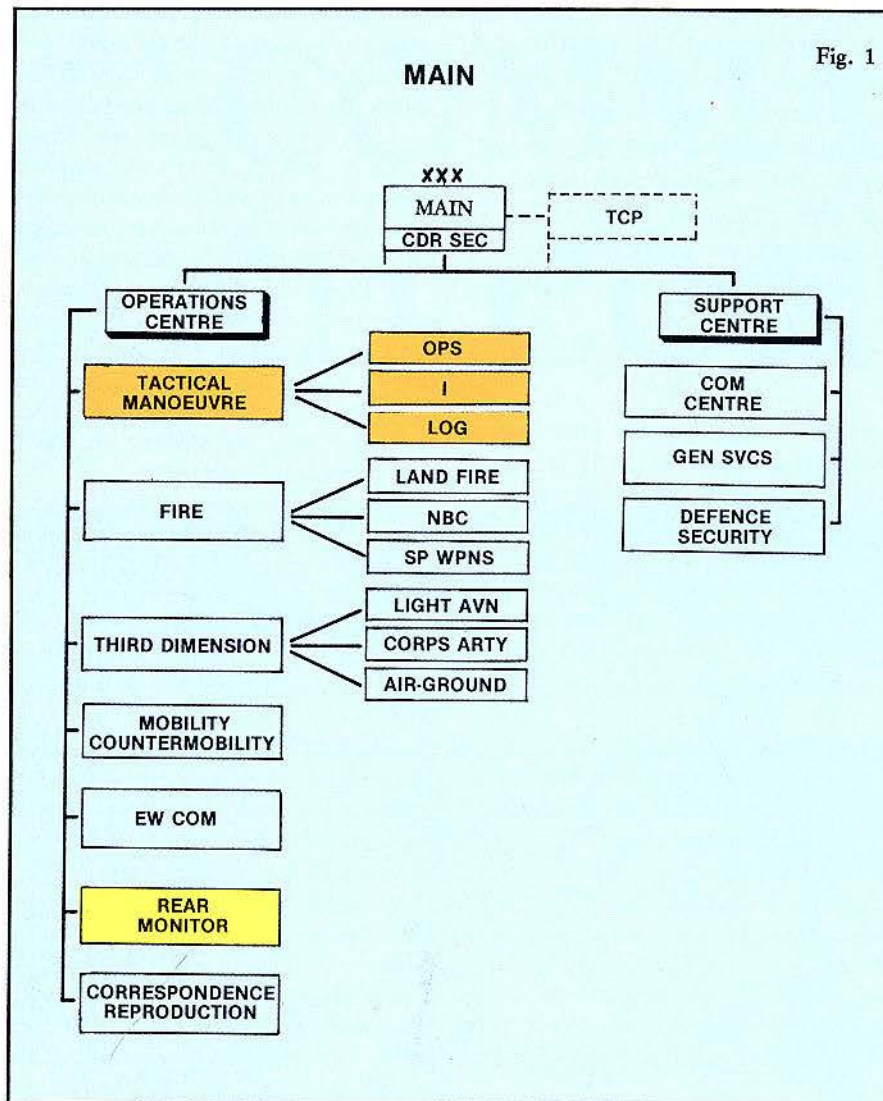
Actually, development and feasibility studies are under way on the "Field Communication and Information System" (CATRIN) and the "Automated Command and Control System" (SIACCON), respectively. These studies represent the "launching platform" for many complex initiatives concerning command, control, communications and information (C³I). The completion of these studies and the consequent introduction of fully automated systems will be a decisive qualitative improvement in C³I, both in peacetime and on emergency.

As concerns the format, the publication consists of a *Text* — subdivided into four *Parts* with many tables — and *Enclosures*.

PART ONE

This part of the volume describes the Commander's tasks and responsibilities, the principles on which a correct command and control action must be based and the command and control structure permitting such an action.

In particular, it confirms that the command and control function originates from the authority and



stitute, as a whole, the command and control organization whose structure is adequate to the requirements of the different organizational levels (Army Corps and Brigade).

PART TWO

ARMY CORPS COMMAND AND CONTROL ORGANIZATION

Together with "Part Three", relevant to Brigade Command and Control Organization, this section is the core of the Publication.

In fact, it describes an organization in line with the principles outlined in "Part One", whose activity develops according to the content of "Part Four" which deals with the functioning of the Headquarters.

It describes the organization and the deployment of the Army Corps Command Post in operations. In particular, it sanctions the latter's subdivision into two Command Posts, the **MAIN** and the **REAR**, accomplishing different functions: the **MAIN** plans and implements tactical and information activities while the **REAR** is concerned with planning and conducting logistical and administrative activities as well as personnel management.

Furthermore, the **MAIN** can set up a very streamlined, mobile **Tactical Command Post** with the aim of enabling the Commander to accomplish his tasks in a timely way and to take into account the development of the situation.

To ensure the continuity of command in case of neutralization or transfer of either the **MAIN** or the **REAR**, a **cell monitoring** the main activities is set up in each of them. Moreover, to meet the requirements associated with the activities conducted in the Communication Zone, the Army Corps Hqs. avails itself of a predetermined **Military Territorial Command** which, on emergency, acts as a **Communication Zone Command**.

The **MAIN** and the **REAR** include the Commander Section

the responsibility given to any Commanding Officer for training and employing subordinate units, harmonizing their actions and verifying the validity of his orders in relation to the situation.

In this context, **command** can be identified with all those activities by which the Commander directs and coordinates the forces under his control for the accomplishment of the tasks and the attainment of the goals set by a higher command; it is never detached from **control**, which can be identified with all the activities allowing to ascertain, at all levels, the dynamic adjustment of management and coordination to the current situation.

All Commanders at the various

hierarchical levels, linked by authority and responsibilities, constitute the **chain of command**.

The criteria governing the relations between the different Commanders are: a precise definition of their respective area of responsibility; the assignment of the tasks and the realization, among the various areas of the same level, of a horizontal liaison called "cooperation link" permitting the maintenance of a minimum operational capability, should the vertical link along the chain of command be temporarily cut.

On the basis of these principles, the Commander and the system enabling him to accomplish the command and control function, con-

(Deputy Commander in the REAR), the Operation Centre and the Support Centre.

In turn, the Operation Centre and the Support Centre are divided into various cells and some of them are particularly important for their functions. As concerns the **Operation Centre of the MAIN** (fig. 1), mention should be made of the **Tactical Manoeuvre Cell**, **Fire Cell** and **Third Dimension Cell** (which constitutes a real innovation compared to previous organizations) and the abovementioned **Monitoring Cell** in the REAR.

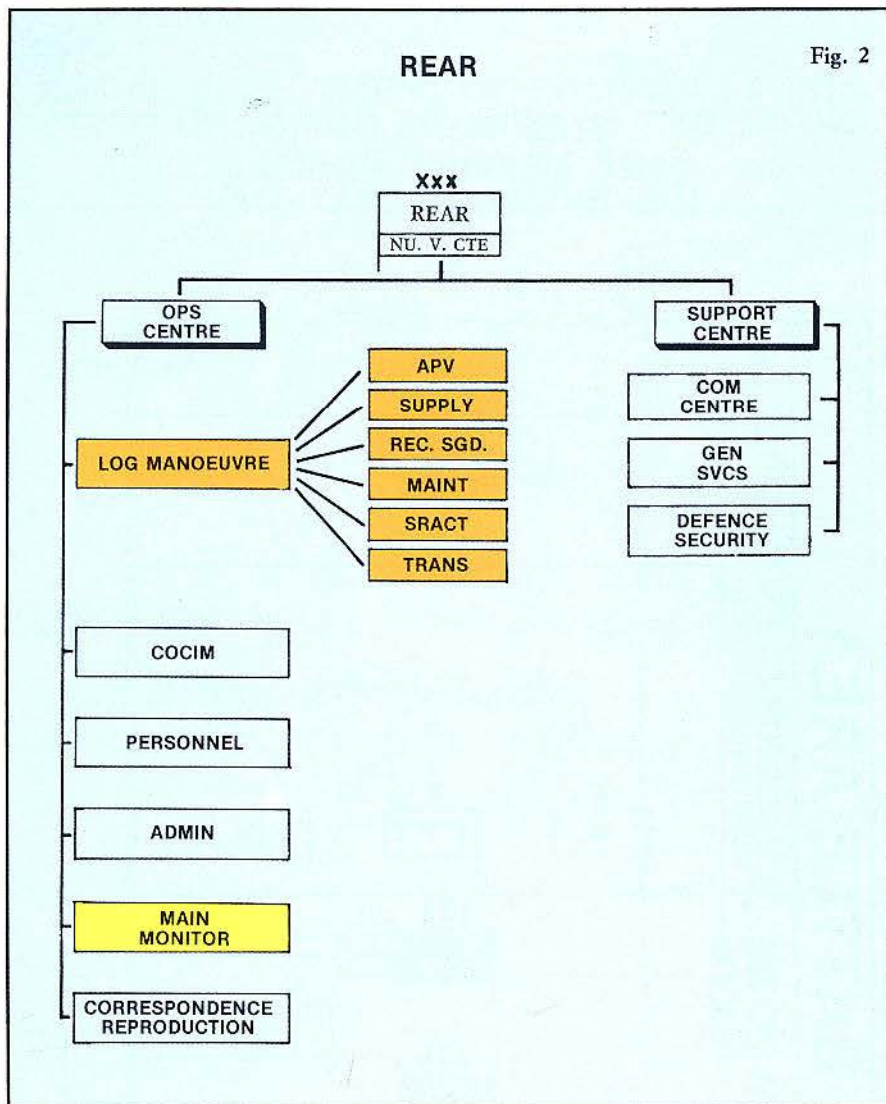
The **Tactical Manoeuvre Cell** controlled by the Chief, Operations and Training Office (G3) and, in turn, divided into **Operations Team**, **Information Team** and **Logistics Team**, is concerned with planning and implementing all tactical, information and logistical-operational activities; therefore, it has all the qualifications to become the real Decision-making Centre of the MAIN in the future automated command and control system (SIACCON).

The **Fire Cell**, controlled by an officer of the Corps Artillery Command, is divided into Teams (**Land Fire**, **Special Weapons Employment**, **NBC Defence**) and contributes to solve the operational problem, within its province, while directing and coordinating also NBC activities.

The **Third Dimension Cell**, commanded by an officer designated by the Corps Chief of Staff, chosen among the commanders of the Cell Teams (**Light Aviation**, **Corps Artillery**, **Air-ground cooperation**) is charged with the employment of weapons and systems operating in the third dimension and coordinates the relevant activities.

The **REAR Monitoring Cell**, headed by an Officer designated by the Deputy Chief of Staff for Logistics, can constantly follow the situation in the REAR and ensures the accomplishment of its tasks, should the REAR be neutralized or moved.

As concerns the cells of the **REAR Operation Centre** (Fig. 2),



particular importance is attached to the **Logistical Manoeuvre Cell**, in addition to the **Monitoring Cell** of the MAIN.

The **Logistical Manoeuvre Cell**, controlled by the Chief of the Staff Section, Logistics Office, is divided into functional teams (one for each logistical activity) and is responsible for the planning and implementation of the logistical manoeuvre.

Finally, as concerns the deployment of Command Posts (Fig. 3) in **Defensive Operations**, the MAIN is deployed near the forward edge of the Army Corps Communication Zone, while the REAR is located in a rear area, at a safe distance from the MAIN (15-20 km).

In **Offensive Operations** (Fig. 4), the MAIN is deployed behind the

areas where the Brigades were initially located as a reserve and the REAR is behind the MAIN at a distance of about 10-5 km.

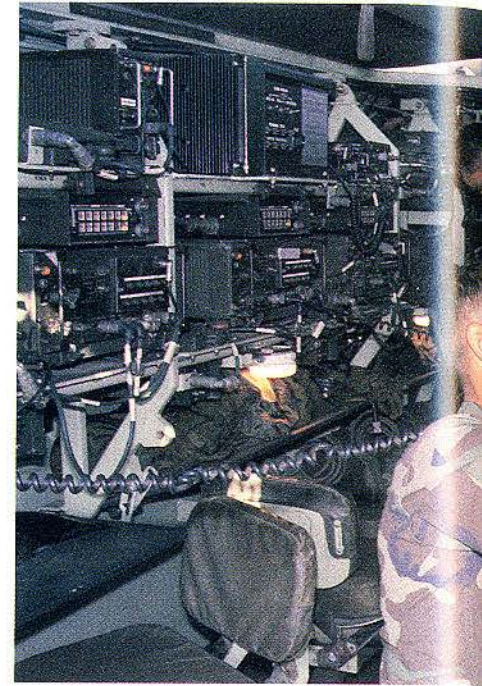
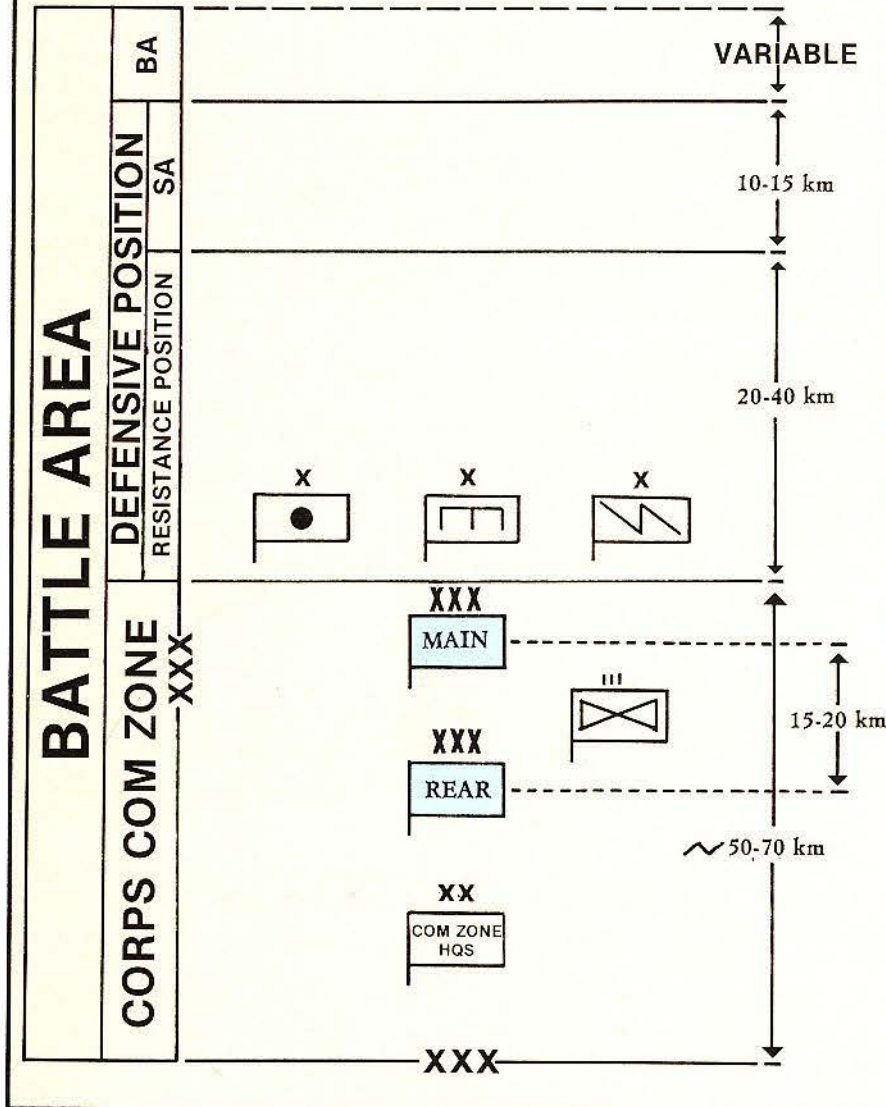
To conclude, mention is made of the procedures for changing deployments.

In particular, the two conflicting needs conditioning the frequency of movements are pointed out, namely the need to avoid Command Posts being attacked by the enemy (EW actions, in particular) by having recourse to frequent redeployments and, at the same time, the need to give the Staffs a certain "stability" for their correct functioning.

In this context, only the development of the operations will indicate when the movements must be made

Fig. 3

INITIAL DEPLOYMENT OF COMMAND POSTS OF AN ARMY CORPS (DEFENSIVE OPERATIONS)



Operators within a Command Post
on a tracked vehicle

Therefore, during the operations, the Brigade Hqs (Fig. 5) establishes only one **Command Post**, divided into two sections — **Main** and **Alternate** — which plan and execute operational and administrative activities as well as personnel management; in case of neutralization or movement of the Main Section, the Brigade can guarantee the continuity of command through a replacement cell located in the Alternate Section.

The core of the whole Command Post is the Operations Centre of the Main Section, which is responsible for tactical, logistical and information activities. Within **SIACCON**, it will constitute the Decision-making Centre of the Brigade Command Post, while the Officers charged with Tactical Supports will set up the **Information, Analysis and Selection Centre (CASI)** within the same system.

As concerns its deployment, the Command Post will be placed, in **Defensive Operations**, behind

and, in any case, they shall have to be planned so as to allow the continuity of command.

PART THREE BRIGADE COMMAND AND CONTROL ORGANIZATION

While Part Two deals with the Corps level, Part Three describes the tasks, functioning and organization

of the Brigade Command Post.

In substance, the operational functions accomplished at Brigade level are not different from those at Corps level; a difference is that the organizational and executive activities predominate over the planning ones.

Hence, the need to have, as soon as possible, all the data necessary to make rapid and coordinated decisions.



the Brigade temporary defense position, near the reserve combat group; both sections must be deployed at such a distance (3 km) to avoid being involved in enemy actions.

As concerns the procedures for making changes in deployments, the same remarks made about the Army Corps are valid for the Brigade, even though the latter shall have to be redeployed more frequently.

PART FOUR FUNCTIONING OF COMMANDS

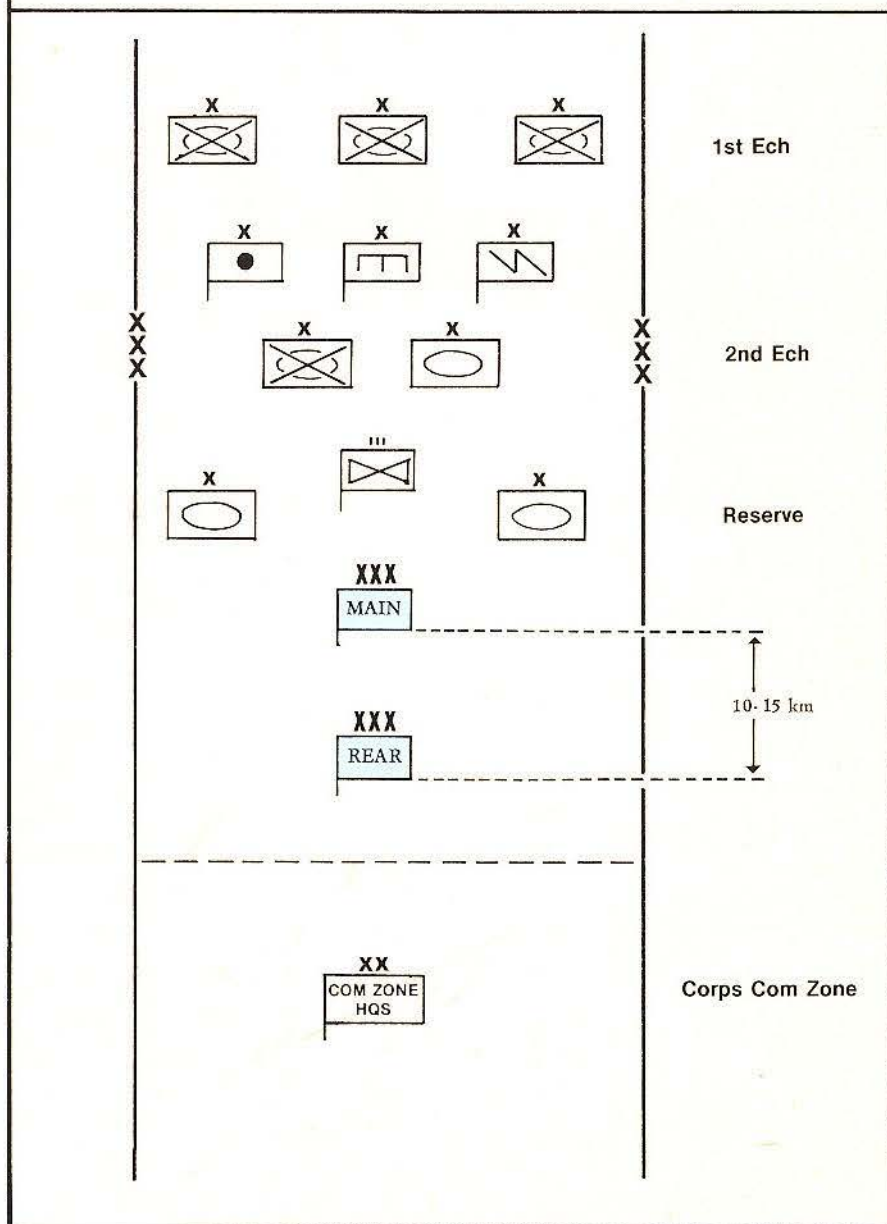
This part includes many enclosures and describes how the Command of a Major Unit, or equivalent, functions, examining in detail — as if it were a handbook — work procedures and documentation. It contains work stages, types of communication, work tools and all documents such as letters, messages, summaries, notes, reports and so on, prepared within a General Staff.

ENCLOSURES

As mentioned before, attached to this publication are several enclosures giving, above all, practical

INITIAL DEPLOYMENT OF COMMAND POSTS OF AN ARMY CORPS (OFFENSIVE OPERATIONS)

Fig. 4



examples of how to prepare the documents more frequently used in General Staff work. Among these, particular importance is given to the **Operations Order** which is dealt with exhaustively and illustrated with a graph.

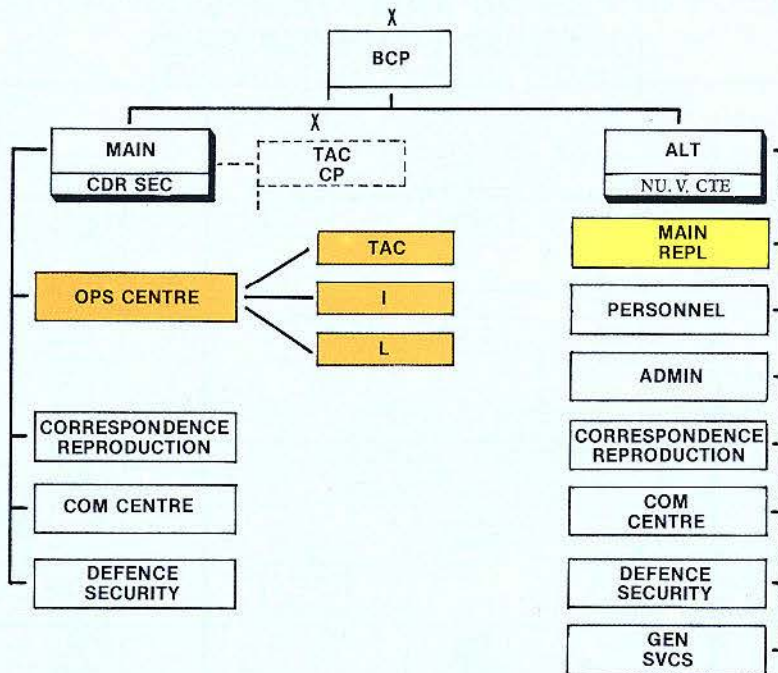
Moreover, in the first two enclosures the hierarchical-functional military Structure and the Method for the solution of military problems are fully described.

CONCLUSION

Within the framework of the renewal of the doctrine begun with the overall review of series 900, Volume IV of series 900/A represents a further and significant step towards the completion of Army regulations. These new regulations would provide the Service with a frame more and more adequate to a credible, modern and flex-

BRIGADE COMMAND POST

Fig. 5



ible military posture. Actually, an advanced, effective and flexible organization, capable of utilizing all innovations in the field of the information technology, in order to realize an automated command and control system, is an essential prerequisite for the achievement of the outlined military posture.

In fact, we must realize that the activities associated with the C³I sector and all modern operational concepts are increasingly affected by the rapid technological progress.

The weapons and equipment which are being introduced are extremely sophisticated and their performance is higher and higher. The operational scenarios are rapidly changing and concern increasingly large territories.

In this framework, each commander shall have to make, in the future, more and more rapid and significant decisions requiring the immediate availability of a large flow of information and the communication of orders in real time.

Therefore, it will be necessary to have tools ensuring a rapid and effective decision-making process; the Commands of Major Units, or equivalent described in Part Three and Part Four of this Publication, are divided into cells representing the structure of the future SIAC-CON that the Army Staff is intensively studying and testing in view of its introduction; this system will certainly allow us to meet our requirements.

In conclusion, it is a publication linked to the present and, at the same time, projected towards the future, but it is also a practical handbook for all those who work in a General Staff.



Observation post on a M113 tracked vehicle

①

ARMAMENTO: 4 CANNONI 'DERLIKON' KBA AUTOMATICI DA 25 mm
SISTEMA DI PUNTAMENTO OPTRONICO DIURNO E NOTTURNO
RITMO DI FUOCO: 2400 COLPI/MIN

SG RESTANI 91 - 1169



M113 ARMATO CON TORRETTA SIDAM 25 PROGETTATA E COSTRUITA PER L'ESERCITO ITALIANO

**SISTEMA INTEGRATO
MOBILE**

'SIDAM 25'

**DIFESA C/AEREA
4x25 mm**

SISTEMI CONTRAEREI SEMOVENTI OTO

CARRO C/A 'OTOMATIC' DA 76/62



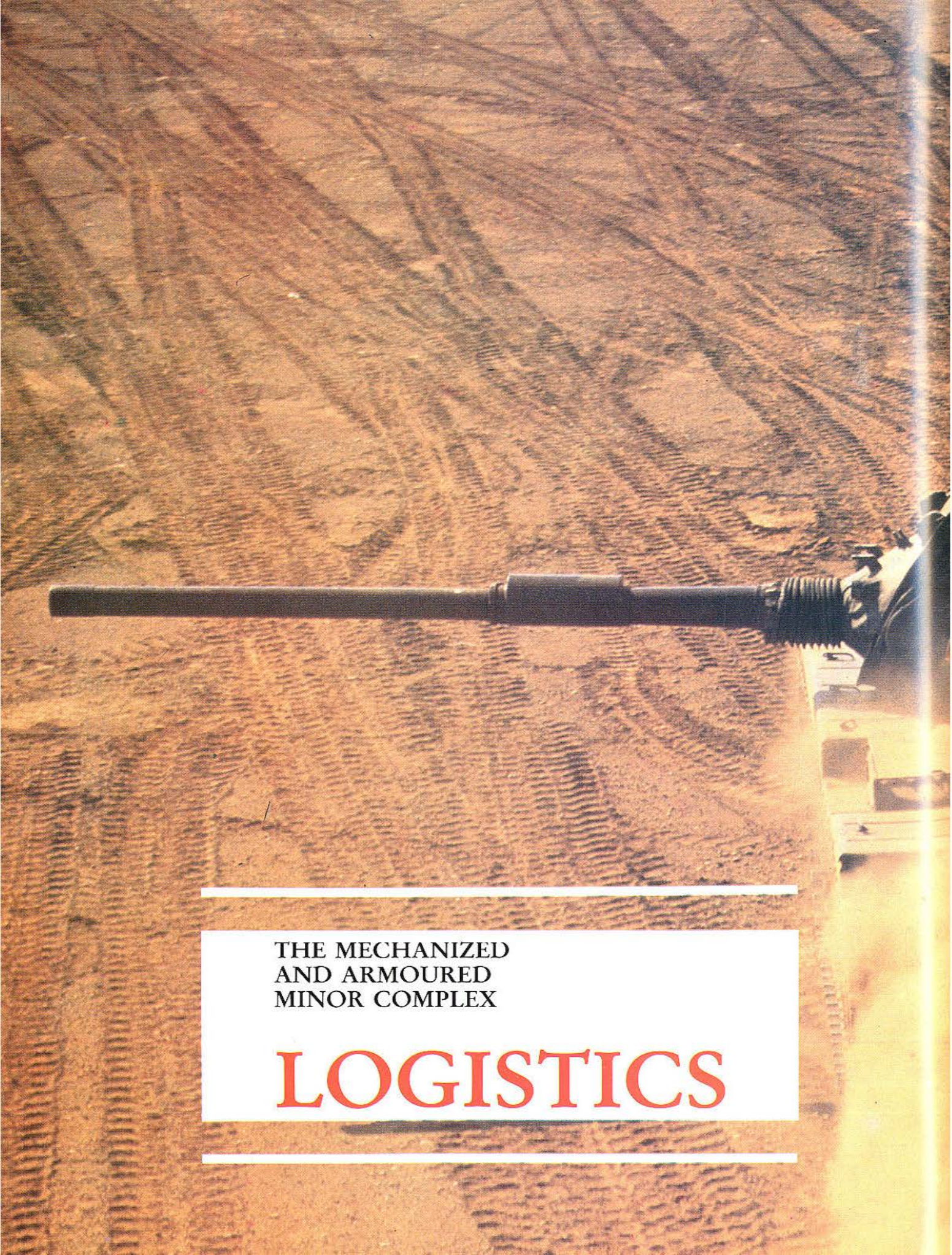
SISTEMA C/A AUTONOMO DA 76/62 - RITMO DI FUOCO: 120 COLPI/MIN
RICERCA E INSEGUIMENTO RADAR E OPTRONICO
SISTEMA DI CONTROLLO DEL TIRO STABILIZZATO



OTO MELARA SpA, (19100) LA SPEZIA VIA VALDILOCCHI 15
TEL (0187) 530 111 - TELEX 270368-281101 OTO I - TELEFAX (0187) 530 669

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FINANZIARIA
E. BREDA



THE MECHANIZED
AND ARMoured
MINOR COMPLEX

LOGISTICS



In general, the minor complex is fully supported by the combat group to which it belongs.

Only exceptionally, if it has to conduct an eccentric action or if it is located in proximity of a Logistic Centre, the minor complex can accomplish the tasks of "first link of the logistic chain" and constitutes an efficient logistic organization ensuring its support through its own bodies and means as well as through additional equipment.

In consideration of its organizational level and limited needs, the minor complex which must carry out the functions of first level, has a very simple and reduced structure. As a rule, it is supported directly by the second level, as in the case of the battalion. Considering the limited logistic organization of the minor complex, the second organizational level shall have to envisage numerous interventions on the spot.

The logistic organization must aim at guaranteeing full and immediate mobility and also making up for the limited self-sufficiency with a high sustainability.

Command, managing and executive bodies are listed at table but, in practice, the Commander of the minor complex directs and controls all services.

The logistic means of which the minor complex can avail itself are represented by the units' equipment and the relevant means of transportation if, of course, the minor complex has not such equipment. In particular:

- **basic loads:** they include individual equipment allotted on a permanent basis and in a fixed amount, to ensure the basic logistic self-sufficiency;

- **additional equipment:** allotted each time with the relevant means of transportation to increase the basic self-sufficiency according to the specific task to be accomplished.

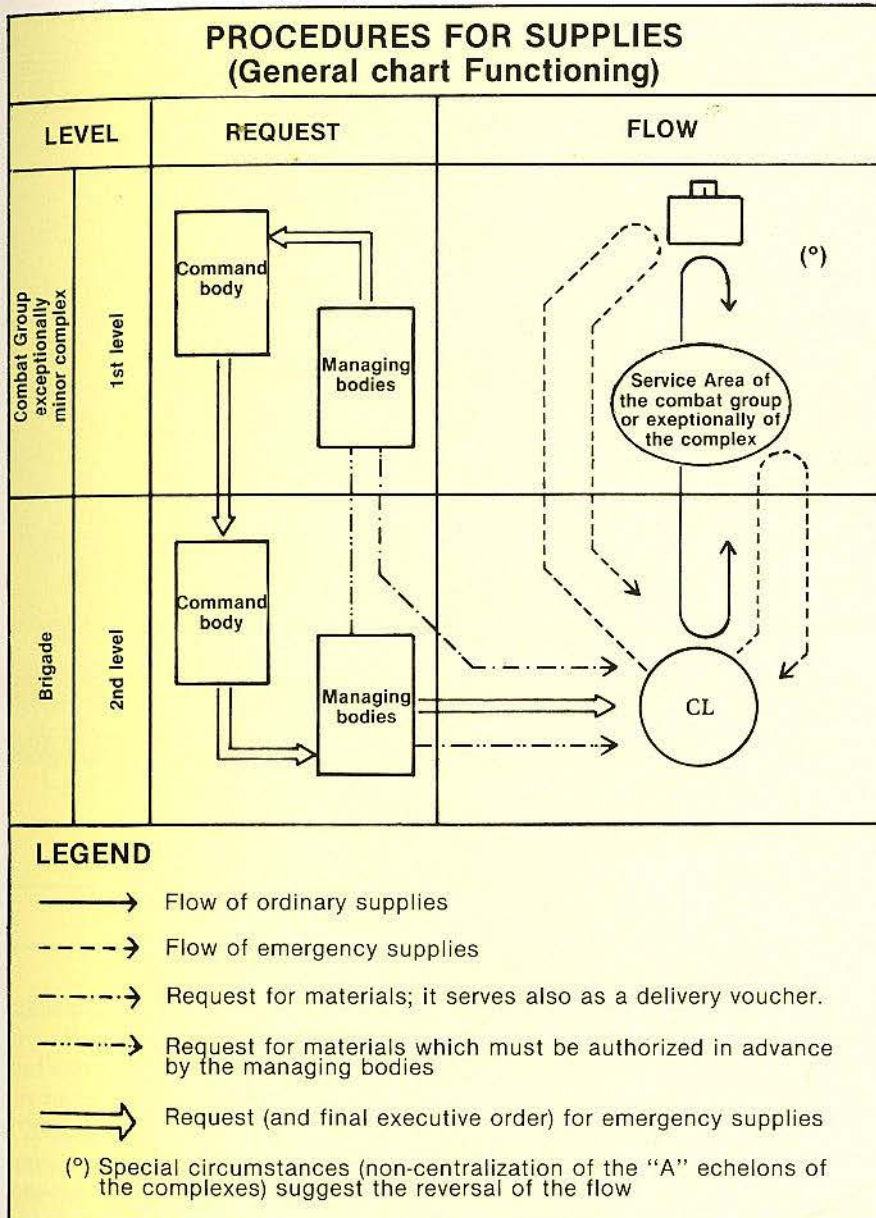
The additional equipment must be such as not to make the minor complex heavy and sometimes, in relation to the planned basic tactical actions, it is positioned in proximity of the areas where the unit will deploy.

The executive bodies and the logistical equipment of a minor complex exerting first level functions — except for the First Aid Station, generally placed in the combat group service area — are located in a minor complex service area which must afford good possibilities of dispersal, cover, internal roads, natural protection and water resources.

The logistic activities usually conducted by the logistic bodies of the

COMMAND, MANAGING AND EXECUTIVE BODIES OF A MINOR COMPLEX REPRESENTING THE FIRST LINK OF THE LOGISTIC FUNCTIONAL CHAIN			
Sectors of intervention	Organs		
	Command bodies	Managing bodies	Executive bodies
Medical Services	Commander of the minor complex	Combat group Medical officer	• First aid station •
Personnel Services • Quartermaster • Post and Telegraph		Command and services platoon leader	• Kitchen team • Command & Services Platoon Command cell
Equipment and transport services • Weapons • Motorization • Transport			• Command & Services Post specialists • Command & Services Platoon specialists • Medium & Light trucks of the Command & Services Platoon

EXECUTIVE BODIES OF THE SERVICES AT THE DISPOSAL OF A MINOR COMPLEX REPRESENTING THE FIRST LINK OF THE LOGISTIC FUNCTIONAL CHAIN			
Executive body	Working capabilities	Means of transportation	Ready to move in:
First Aid Station	40-50 interventions per day (°)	1 APC (of the Aid Station stretcher-bearer team)	15-30 minutes
Stretcher-bearer Team	40-50 wounded per day	1 APC	immediately
Food stores	200 rations/meal (considering the availability of a wheeled kitchen).	1 medium truck (for towing)	5 (°°)-30 minutes
Engineer materials and ammunition supply post	Possibility of moving 10-20 tons per day, (°°) increaseable by rising labour and equipment.	Medium & Light trucks of the Command & services Platoon and Anti-tank Platoon and possible additional means	5 (°°)-30 minutes
Refuelling post	Possibility of moving 10-20 tons per day, (°°°) increaseable by rising labour and equipment.	Medium & Light trucks of the Command & services Platoon and possible additional means	5 (°°)-30 minutes
(°) First treatment interventions (°°) All materials are wheeled. Time necessary to get the means ready (hooking of trailers, removal of camouflage and tracks etc.). (°°°) Each man (artificer, various services etc.) can ensure the movement.			



combat group and, exceptionally, by the minor complex are the following:

- supply;
- recovery and evacuation;
- maintenance;
- medical activities, limitedly to first aid, collection and first treatment of the wounded;
- transport.

The supplies aimed at either restoring or completing the equipment, according to the circumstances, are divided into:

- **ordinary supplies:** to replace normal consumption;
- **preventive supplies:** to meet special planned requirements with materials stockpiled in the service areas of the minor units;
- **emergency supplies:** to face crises caused by sudden changes in the tactical situation (counterattacks, pursuance of in-depth efforts or changes of gravitation) or in the logistic situation (massive destruction of equipment, critical reduction of transport capability); these supplies are delivered on the spot.

The equipment is kept in wheeled vehicles as long as possible to ensure the logistical bodies a full and immediate mobility. These means guarantee the delivery of the equipment on the spot on request of the minor units. Once empty; the vehicles are loaded again at the brigade service area and go back to the Service Area of the combat group.

Unserviceable or unusable materials as well as booties are recovered and moved by the minor unit to the service area of either the combat group or the major unit supporting the minor complex by utilizing, as much as possible, the unloaded vehicles previously used for carrying the supplies. Otherwise, this operation is conducted by the special equipment of the Light Workshop recovery team.



Dismounting of assaulting squad from combat vehicle



Tankmen training on M/60 tank

MECHANIZED OR TANK COMPANY					
General subdivision of the vehicles in the "F" and "A" Echelons					
Vehicles		"F" Echelon		"A" Echelon (°°)	
type	no.	employment	no.	employment	no.
motorcycle recce vehicles	1	Company Hqs.	1	—	—
	9	Co. Commander	1 (°)	Services Comm. Platoon	1 (with trailer)
medium trucks	5	Anti-tank post	7 (with trailer)	—	—
		Anti-tank platoon (ammunition)	1	miscellaneous equipment	3
VCC (armoured combat vehicle)	13	Victuals team	—	—	1 (with kitchen)
		Co. Command	1	—	—
		Riflemen Platoon	12	—	—
(°) As an alternative to VCC					
(°°) The vehicles carrying materials not immediately required for combat purposes can be located in the supporting service area, thus constituting the possible "B" echelon.					

Considering the limited technical possibilities of the logistic organization of the minor complex and the essential need not to overload the minor units, **maintenance** is limited to:

- **individual routine maintenance:**

ce: cleaning, lubrication and verification of the efficiency of weapons, vehicles and equipment;

- **first degree specialized maintenance:** verification of the efficiency of weapons, vehicles and equipment after the overall cleaning

and lubrication of their components. This operation is carried out periodically under the responsibility of the specialized personnel of the Command and Services platoon.

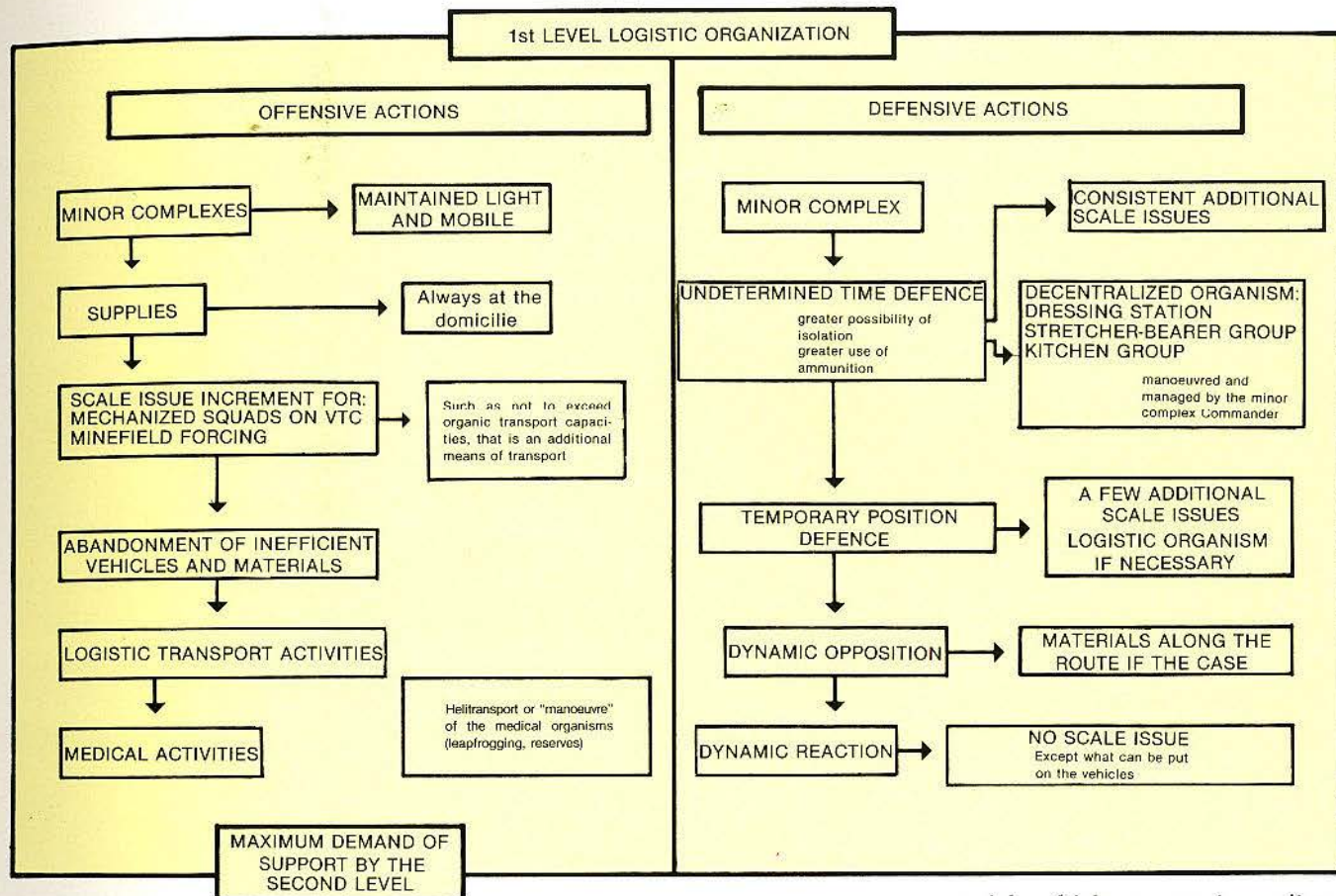
The **medical activities** concern:

- **first aid:** given by all personnel utilizing materials issued to the individual men ad to the units (medication box, first aid kits for tracked or armoured vehicles etc.);

- **collection of the wounded and the ill:** made by stretcher-bearers who can avail themselves of a specially equipped combat vehicle capable of moving on any terrain, even very near the line of contact;

- **initial treatment:** given by a medical officer at the first aid station: it is an emergency treatment enabling the wounded to be evacuated to the field hospital of the rear service area.

Transport allows the carrying out of command, combat and logistic activities and is ensured by the minor complex vehicles, divided into two



materials which are not immediately required, can be located in the supporting Service Area and make up the "B" echelon (other supporting transport).

TANK COMPANY					
General subdivision of the vehicles in the "F" and "A" Echelons					
Vehicles		"F" Echelon		"A" Echelon	
type	no.	use	no.	use	no.
motorcycle	1	Company Hqs.	1	—	—
recce vehicles	1	Co. Comm. (°)	1 (°)	—	—
medium trucks	2	—	—	various equipment	2
medium trucks	1	—	—	victuals team	1 (with kitchen)
tanks	16	Company Hqs	1	—	—
recovery tank	1	Tank platoons	15	recovery, rescue, works	1

(°) As an alternative to the tank
 (°°) The vehicles carrying materials not immediately required for combat purposes can be located in the supporting service area, thus constituting the possible "B" echelon.

echelons:

- "F" echelon (transport for battle): vehicles necessary for combat and command;

- "A" echelon (resupply): vehicles for carrying the equipment and or-

dinary supplies.

As a rule, the "A" echelon is located in the combat group Service Area and, only exceptionally, in the minor complex Service Area.

The vehicles destined to carry

THE MECHANIZED AND ARMOURED MINOR COMPLEX LOGISTICS

CISM



INTERNATIONAL MILITARY SPORTS

At the end of the Second World War, the Chief Commander of the Allied Forces in Europe, Gen. Joseph McNarney, felt the need to merge his million men together in some mutual interest; he thus sought a means having nothing to do with war which would overcome language and cultural barriers and concentrate this considerable mosaic of troops into mutual peaceful ideals.

A few months after the end of the War he decided to engage the above soldiers in some activity having a different spirit from the traditional one, connected with guns and tanks, though respectful of the flag and uniform of each Nation.

He thus turned to the Sports Board for the Allied Forces (CSFA) which had been established in the early 20s after the First World War by the American General John Pershing when the Chief Commander had been faced with a similar problem.

General McNarney did his best to bring the past to life once more. The CSFA was given new input and the Allied Forces of 12 nations of Eastern and Western Europe met on the grounds of the game in perfect harmony.

Special mention must be made of the Hanover, Bruxelles, Ostend and Berlin competitions; in fact, it was in this last city that the Czechoslovak Emile Zatopek made himself known in the field of international sports running 5,000 metres in 14'32".





In 1947, however, clouds of a political nature gathered on the horizon and Russia together with other Eastern countries withdrew from the scene. Unfortunately, Great Britain and America soon followed their example and CSFA quickly disintegrated.

A handful of Nations, however, clearly understood the influence sports could have in uniting the Armed Forces of the world in an atmosphere of friendship and mutual assistance and refused to let the original idea die away.

The French Armed Forces thus organized a historic meeting in Nice in February 1948 to establish a standing international association for military sports.

During this important meeting the statutes and regulations necessary for the establishment of a world-wide organization were decided and ratified.

The Military Sports International

Board (CISM) organized in a modern manner and fully aware of its peaceful aims began working with the co-operation of just five Nations and reached a membership of 87 countries during its 40 years' existence.

THE ORGANIZATION

According to the statute, the Delegations of member Nations take part every year in the **General Assembly** organized and directed by the Executive Committee (on an elective basis) formed by a Chairman, three Deputy-Chairmen and seven members.

The last Assembly (42nd) was held in Lisbon last April under the Chairmanship of General **Jean Duguet** (France).

The supporting bodies are the Standing General Secretariat (directed by Col. **Roland Kesteloot**, Belgium,

CISM swimming, water-polo and diving Championships, 29th Edition.

Bruxelles, rue Jacques Jordaens 26) and the 13 peripheric liaison Offices located in the various continents: No. 2 in Europe (South and North), No. 3 in America (South, North and Centre), one in the Middle East and one in the Far East.

English, French, Arabic and Spanish are the official languages.

The **CISM** flag is white with a light blue border; at the centre there is the coat-of-arms of **CISM** with five red circles around the inscription **CONSEIL INTERNATIONAL DU SPORT MILITAIRE** in white letters.

CISM also has its march, composed by Lt. Commander **L.S. Lawton** of the American Navy and its anthem, written by an Italian, Mrs. **Carla Foniutti**.

The aims it pursues are the following:

- plan agonistic activities and en-



trust the organization to the different member countries, according to criteria of rotation and mutual exchanges;

- establish and keep alive the relations among Armed Forces with the aim of developing research and study in the various fields of sports and sports medicine;

- promote collateral activities (round tables, polls, exchanges of visits at the Summit, etc.) to strengthen understanding, mutual respect, solidarity and friendship among nations;

- carry out effective actions, from a financial point of view as well, as regards the less favoured member countries (Central Africa and South America).

AGONISTIC ACTIVITY AND ITALIAN PARTICIPATION

The sporting disciplines accounted

for by the CISM statute are 26, chosen among the most popular (football, basket ball, volley ball, etc.) and including those most suited to military training (pentathlon, riding, fencing, parachute-dropping, shooting, bearings, etc.).

Italy joined the "founder" Nations and became a member of CISM on July 1st, 1949.

Our Nation gave a valid contribution to the success of CISM throughout the world both athletically speaking and from an organizational point of view. In fact, an Italian, Admiral **Aldo Massarini**, occupied for nine years (1970-1979) the Chairmanship, while another Italian, General **Basilio Crisone** was head of the Liaison Office for Southern Europe from 1978 to 1982. Colonel **Renato Agostino** has been occupying this post since May 1st, 1986.

In the last decades the participation of military representatives — drawn from the sport Units of the three Armed Forces (Army, Navy

Military Football Championships: ITALY-GERMANY, Vialli in action.

and Air Force), the Carabinieri Headquarters, the Guardia di Finanza Headquarters ("Fiamme Gialle" (Yellow Streamers)), and the State Police ("Fiamme d'Oro" (Gold Streamers)) — always obtained consent and success.

As regards technical results, the list of athletes is endless. Believing in the forgiveness of all those who will remain in the shadow of the files, I must mention those who distinguished themselves with the results known to all Italians such as **Corazziere Tosi** in the discus throw, **Finanziere Chiesa** and **Aircraftman Lievere** in the javelin throw, private **Burruni** in boxing and **Morale, Frinolli** and **Ottolina** in athletics, **Dennerlein** in swimming, **Mazzinghi** in boxing, **Maffei** in fencing, **Morresi** in pentathlon, the **D'Inzeo** brothers in riding, **Thoeni** in skiing, **Vivian, Faccenda, Grasselli** and **Romano** in boat-racing. Not to

The Army Chief of Staff gives prizes to the members of the football team which took part in the 1987 CISM championship.

speak of the athletes of our days such as **Mennea** in the 200 metres, **Fava** in the 3,000 hurdles and **Numa** in fencing.

From the date of its establishment to today **CISM** has organized 494 Championships; Italy participated honourably 304 times and faced the burden of organizing 40 Championships.

As regards team sports, in the 33 editions disputed, the **CISM** basket Championship graduated "champion" 23 times the very well-trained United States team, while Italy reached the highest platform on eight occasions. The last gold medal was awarded to our representative at the 34th Championship held in Syria last August. As far as athletics is concerned, Italy has already organized five Championships: 1951 and 1959 in Rome, 1970 in Viareggio, 1973 in Florence and 1986 in Ostia. The latter, the 32nd of the **CISM** series, was "piloted" by the Guardia di Finanza with the participation of 367 athletes belonging to 19 member Countries. On these occasions the Italians wearing stars obtained a record number of medals, 27 against the 19 achieved in Algiers in 1979.

Before concluding, mention must be made of the financial issue. Though the costs of competitions are met by the organizing and hosting Country, the working expenditure of the "CISM centre apparatus" (General Secretariat and organization of Assemblies) is covered by the general budget, the income of which is ensured by an "annual quota" paid by each member Nation.

STUDY ACTIVITY

In 1957 the **CISM Academy** (formed by Medical officers too) was established. It is designed to assure a rational and coherent development of study activities and research in close connection with requirements



of a sporting nature.

Conceived as a technical-cultural Body, the Academy has carried out detailed enquiries into the different doctrines of training and sport medicine, thus giving representatives of member countries useful elements of comparison.

The relative organization accounts for a Directing Committee and 3 study departments (Documentation, Training and Sports Science) having normal working relations with International Sports Federations.

For a correct updating on the

development of the techniques concerned, contacts are frequently held with similar organizations and the working production of the Academy consists of publications (an average of 4^a year), much appreciated especially as regards the scientific aspect and research.

CONCLUSIONS

The headlines of the last months all spoke of the brilliant success of the Italian military representatives in the **CISM** judo, football, swimming



Brusson. Biathlon contest.

and water-polo Championships.

In San Diego, California, the military national team of judokas formed by athletes from the Carabinieri and Finanziari, won the world championship and entered the finals of South Korea.

For the first time in the history of CISM and after a 14 years' wait, Italy won, on the grounds of Arezzo, the world football gold medal scoring 2-0 against Germany in the final game.

In the beautiful polysports grounds of Chianciano Terme where the 29th edition of the CISM swimming, water-polo and diving world Championships were held, Italy was awarded 11 gold, 2 silver and 2 bronze medals and the world title in water-polo.

The Italian National skiing team of the Army honoured its flag winning with great advantage the French and German National teams (classified second and third respectively) the trophy of the XXX edition of the military ski world Championship held in Valle d'Aosta in the first decade of March.

A performance which saw the "leading characters of the snow" in the lime-light: Alberto Tomba was absent because engaged in the world Championship, but Passler,

Zingerle, Palhuber, Klem, Albarello, Vanzetta and... many more triumphed.

These are proofs of willpower, engagement and ability. The motto which animates athletes and representatives of the Delegations of the four continents and which one enjoys hearing is: "CISM REPLACES THE BATTLEFIELD WITH SPORTSGROUNDS".

The member Countries of this valid Organization feel responsible for their commitment and with the enthusiasm of true sportsmen they show they can go in the right direction, fully convinced that they are working for the safeguard of peace and freedom throughout the world.

Renato Agostini



Colonel Renato Agostini attended the 90th Superior General Staff Course and worked for the Central Boards (Army General Staff and Defence General Staff) in charge of "staff", "financial planning" and "sports". He was Deputy Commander of the "Cremona" motorized Brigade and at present occupies the post of Head of the Liaison Office CONI-ARMED FORCES.

INTERNATIONAL MILITARY SPORTS

THE CHURCH AMONG MILITARY MEN



The controversy on the presence of clergymen among soldiers is nothing new: who has forgotten Don Milani's attitude on the matter and the relative trial? Nowadays, too, the situation is everything but quiet. Following are the reasons for this presence given by the Bishop of military men together with an outline of the attempts made to suit it to the needs of men in uniform and their families.

When some months ago the list of the Italian dioceses restored after the concordat agreements of 1984 was published, the "Military bishopric in Italy" was put down under No. 228. The apostolic constitution "Spiritual Militum Curae" of April 21st, 1986 had, in fact, raised the vicarships in ordinary to the forces throughout the world to "particular churches comparable to dioceses. Obviously, the consequences of this were drawn in Italy as well.

This is the fact in its elementary juridical enunciation. Undoubtedly, something has changed in the traditional forms of spiritual assistance to soldiers. The new discipline started officially when the apostolic Nuncio handed in the Statutes for Italy in November 1987 and on this occasion a booklet was published entitled "The Church among Military men" outlining certain standpoints and quoting the documents. It may be useful to go back on the above outline.

The mentioned apostolic Constitution is brief. It describes the new canonical image of the Military Bishopric and learnedly draws out characteristics and novelties: assimilation to dioceses, broadening of the number of church-goers, cumulativeness of jurisdiction with local bishops, participation of the bishop to the Episcopal Conference, own permanent presbitery, summoning of laymen to take up their responsibilities for the growth of this church.

The apostolic Constitution is a kind of law and the Statutes are designed to root principles in the reality of the different countries. This is something new for canonical regulations.

One may rightly wonder what improvements this last document can have brought. Actually, it is not only a juridic improvement of the apostolic Constitution, but a necessary addition.

We may say that the value of the Statutes is equal to the above Constitution as regards both origin and authority. Furthermore, the Statutes allow the principles of the Constitution to become incarnate, as we used to say, in the different situations.

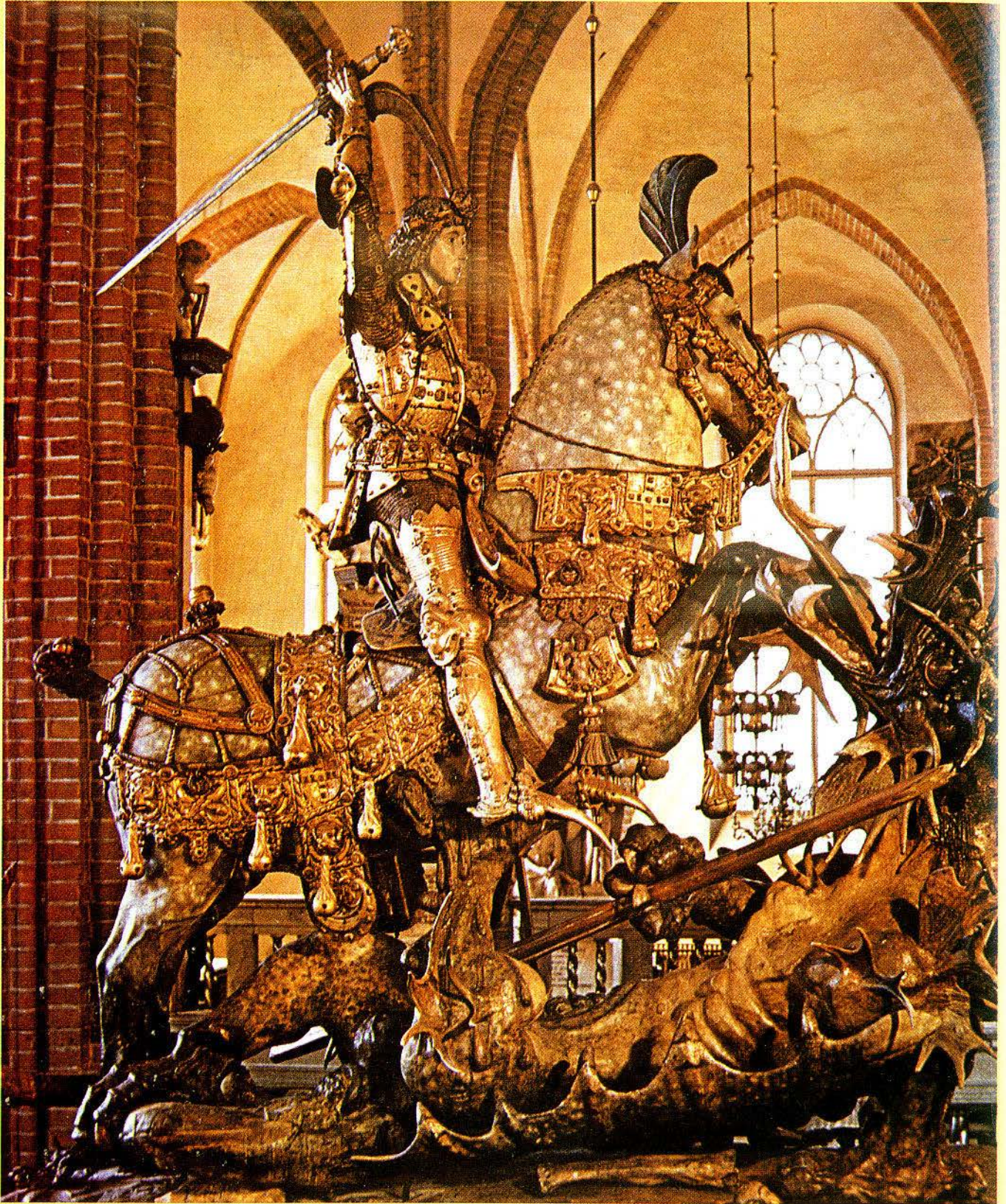
Military chaplains, the side bodies of spiritual assistance, traditions and requirements vary from country to country. In most cases the Military Bishop is also the head of the chaplains as far as organization is concerned. On the contrary, in some other cases the canonical figure is separated from the civilian-military one and the person is also different. Thus, the organization is varied and so is the setting of this operational field within the pastoral sector of the nation.

Hence the importance of the national Statutes. The Holy See has taken into account what it has been negotiating with the Italian government since 1926. It has also put into the regulations what it has learned through more than 70 years' experience.

With all the caution and the determination required by the issue, we must aim at making all church goers feel part of the church and all Catholic soldiers be responsible for building up their church. It is not a matter of relieving responsibility, but on the contrary of multiplying it. The validity of many rules and structures stated in the Statutes will be estimated on the basis of the above requirement.

Though not pedantic and detail-





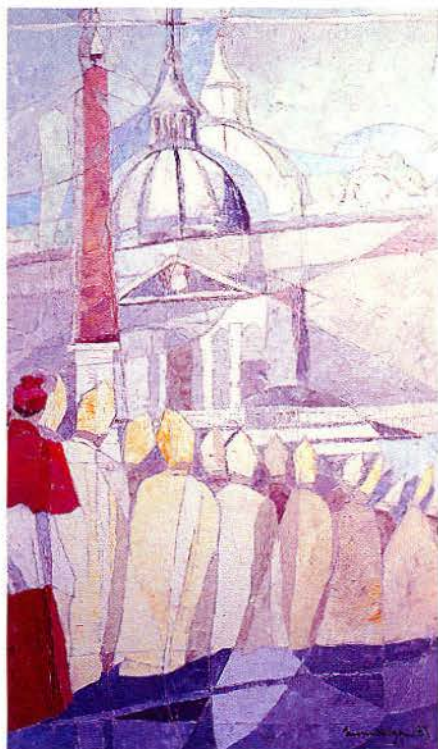
This polychrome and gilded wooden group represents Saint George and the dragon (Stockholm, church of Saint Nicholas). It is a work of art by Bernadotke one of the most original interpreters of the late German Gothic. In Germany and in the other countries of Central Europe, sculptors remained faithful to medieval schemes for a long time and insisted on detailed realism in the attitude of the figures.

ed, the Statutes nevertheless make definite choices for Italy: no seminary for military chaplains and no hinging to Italian churches. Another qualifying position is given by the different bodies of communion for presbyteries and laymen. An important novelty is the establishment of a fund, on a voluntary basis, to support those activities which may not be relinquished from a pastoral point of view even though they may not be covered by the military institution: vocations, training of lay and religious hospital staff, diocesan pastoral offices, etc.

The third document registered in the booklet is formed by the pastoral three-year plan for 1987-90 fixed by the Military Bishopric. A plan requires an overall analysis and prioritarian choices. The above is based on the valorization of laymen. The nature of the church requires the active participation of all God's people. In uncertain and subordinate conditions such as in the previous structure, the presence of the church was reduced to the generous and often vanguard activity of chaplains. It must also be remembered that laymen never failed to give their co-operation.

And so? An improvement in quality is an entirely different matter. It will always be necessary to think together and together decide on the best way to organize the cult and the spiritual assistance within the army and, nowadays, among the families, especially in the so-called "blue villages" or "military townships", who may require assistance. The pastoral Councils which are already underway on three levels — local, area and central — will certainly find abundant space and incentives. But there is more which cannot escape whoever pays attention to today's and tomorrow's pastoral requirements. It is the "new evangelization" as the Pope put it.

I am often asked what will change in the Ministry. My reply is provocative: nothing and everything. Nothing if we consider the daily chores of a good chaplain, always attentive and available for any requirement. Churches, chapels, visits



to isolated units, catechesis for confirmation and marriage, sacred and profane choirs, spare time activity, support équipes for people with psychological disorders. Sowing with no chance of reaping in the immediate future. One could call chaplains men of hope. The new point of view, however, aims at favouring the community, small though it may be, with a deeper and more dynamic ecclesiastic presence.

Just words? To say the truth it might be just that. However, what is the meaning of new evangelization if not putting the present military situation in Italy, in NATO and in the world face to face with the needs and, above all, the incentives of the gospel? Indeed, problems are many: from the situation of the young when they first come in touch with military life, from the re-organization of the Armed Forces to the great issues which regard all of us personally such as disarmament, enlistment, peace. Could it be true that Christians have nothing to say or, better still, nothing to add to the current strategic analyses? When we say that we are waiting for the church to have its say, are we thinking only of the Pope? And what about the local communities,

those responsible for and bearers of some kind of experience as soldiers and as men of faith? Is all this worth nothing at all? Is not the fact that we are moving in this direction a pastoral engagement?

Someone has dared to write that the Military Bishopric proves that the church is 40 years behind. I have been told that I should be ashamed of the stars on my uniform. And what about the other six hundred thousand men who are wearing them? Should they also be ashamed of the honoured service they render the community? And what about the Carabinieri who die to defend my freedom? Are they also killers or fools?

Maximalisms are evident in many milieux, but fundamentalists, in all fields, are respectable but dangerous people. They create voids which are immediately filled by the very people we would like to exorcise. An obvious example is the Greens' disengagement in Europe after that in Germany. We know only too well who filled that void. And what if the church were ahead of events because it sees further away?

It is on this front of the ecclesiastic conscience that all men of faith, clergy and laymen alike, are putting at stake the future of the service of spiritual assistance to soldiers, just as the law of the State provides for and promotes in Italy. The church, our church as well, is open to anyone, to those who go towards it and, in other ways, to those who apparently reject it. But we cannot expect a state, rightly lay, to be responsible for spiritual and religious issues when no one considers himself involved and demands the development of such issues as expression of his own freedom.

The building of a church by involving military men and privates, their families and civilians connected with the military world, permanent operators, is something more and better than a project. It is the safest means to be faithful to God and to men.

Monsignor Gaetano Bonicelli
Military Bishop to Italy

THE WAR IN THE MOUNTAINS

by
RUDYARD KIPLING
1917



PODGORA

'We have finished with stones for a little', said the officer. 'We are going to a mountain of mud. It is dry now, but this winter it never stayed quiet'.

An acre or so of the climbing roadside was still uneasy, and had slid face-down in a splatter of earth and tree-roots which men were shovelling off.

It's rather a fresh road. Altogether we have about four thousand miles of new roads — and old roads improved — on a front of about six hundred kilometres. But you see, our kilometres are not flat'.

The landscape, picked out in all the greens of spring, was that of early Italian holy pictures — the same isolated, scarred hummocks rising from enamelled meadows or drifts of bloom into the same elaborate entablatures of rock, crowned by a campanile or tufted with dark trees. On the white roads beneath us the lines of motors and mule transport strung out evenly to their various dumps. At one time we must have commanded twenty full miles, all working at once, but never could we spy a breakdown. The Italian transport system has been tried out by war long ago.

The more the road sunk to the plains, the more one realised the height of the mountains dominating us all round. Podgora, the mountain of mud, is a little Gibraltar about eight hundred feet high, almost sheer on one side, overlooking the town of Gorizia, which, in civil life, used to be a sort of stuffy Cheltenham for retired Austrian officers. Anywhere else, Podgora hill might be noticeable, but you could set down half-a-dozen Gibaltars among this upheaval of hills, and in a month the smooth Italian roads would overrun them as vine tendrils overrun rubbish-heaps. The lords of the military situation round Gorizia are the four — and five-thousand — foot mountains, crowded one behind the other, every angle, upland and valley of each offering or masking death.

The mountains are vile ground for aeroplane work, because there is nowhere to alight in comfort, but none the less the machines beat over them from both sides, and the anti-aircraft guns which are not impressive in the open plains fill the gorges with multiplied coughings more resembling a lion's roar than thunder. The enemy fly high, over the mountains, and show against the blue like bits of whirling ash off a bonfire. They drop their bombs generously, and the rest is with fate — either the blind crack on blank rock and the long harmless whirr of slivered stone, or that ripe crash which

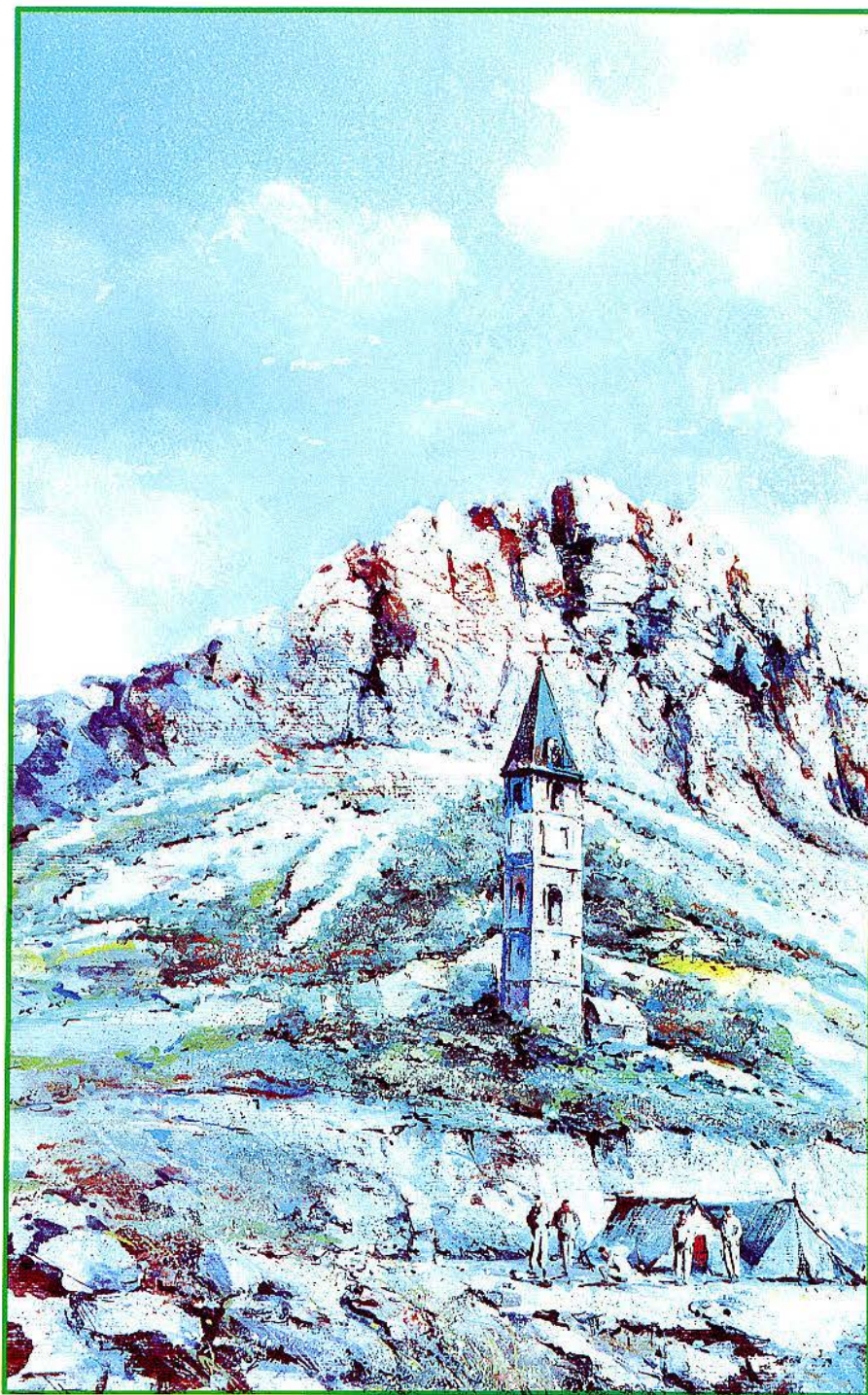


tells that timber, men and mules have caught it full this time. If all the setting were not so lovely, if the lights, the leafage, the blossom, and the butterflies mating on the grassy lips of old trenches were not allowed to insult the living workmen of death, their work would be easier to describe without digressions.

When we had climbed on foot up and up and into the bowels of the mountain of mud, through galleries, and cross-galleries, to a discreetly veiled observation-point, Gorizia, pink, white, and bluish, lay, to all appearance, asleep beneath us amid her full flowering chestnut-trees by the talking Isonzo. She was in Italian hands — won after furious fights — but the enemy guns from the mountains could still shell her at pleasure, and the next move, said our officer, would be to clear certain heights — 'Can you see our trenches creeping up to them?'

— from their menace. There and there, he pointed, the Italian troops would climb and crawl, while thus and thus would the fire of our guns cover them, till they came to that bare down and must make their rush — which is really a climb — alone. If that rush failed, then they must dig in among the rocks. And lie out under the bitter skyline, for this was war among the mountains where the valleys were death-traps and only heights counted.

Then we turned to the captured hills behind us that had lived so unconsidered since they were made, but now, because of the price paid for them, would stand forth memorable as long as Italy was remembered. The heathen mountains in front had yet to be baptized and entered on the roll of honour, and one could not say at that moment which one of them would be most honourable, or what cluster of herdsmen's



huts would carry the name of a month's battle through the ages.

The studied repose that heralds a big push cloaked both lines. No one, except a few pieces who were finishing some private work, was saying anything. The Austrians had their own last touches to put in too. They were ranging on a convent up a hillside — one deliberate shell at a time. A big gun beneath us came lazily into the game on our side, shaking the whole mountain of

mud, and then asking questions of its observing officer across the valley.

Suddenly a boy's voice, that had been taking corrections, spoke quite unofficially at the receiver in the gloom under our feet. 'Oh! Congratulations!' it cried. 'Then you dine with us to-night, and you'll pay for the wine'.

Every one laughed.

'Rather a long walk', said our guide and friend. 'The observing officer — he is down

near Gorizia — has just telephoned that he has been promoted to *Aspirant* — Sub-Lieutenant, don't you say? He — have to climb up here to the artillery Mess tonight and stand drinks on his promotion.'

'I bet he'll come', some one said. There were no takers. So you see, youth is always immortally the same.

GORIZIA

We dropped from Podgora into Gorizia by a road a little more miraculous than any we had yet found, it was in the nature of a toboggan-run, but so perfectly banked at the corners that the traffic could have slid down by itself if it had been allowed.

As we entered the town, men were mending the bridge across the river — for a reason. They do a great deal of mending in Gorizia. Austrians use heavy pieces on the place — twelve-inch stuff sometimes — dealt methodically and slowly from far back, out of the high hills. I tried to find a house that did not carry that monotonous stippling of shrapnel, but it was difficult. The guns reach everywhere.

There was no air in the still hollow where the place lay — hardly a whisper among the domed horse-chestnuts. Troops were marching through to their trenches far up the hillside beyond, and the sound of their feet echoed between the high garden-walls where the service wires were looped among pendants of wistaria in full flower.

There are several hundred civilians in the city who have not yet cared to move, for the Italian is as stubborn in these things as the Frenchman. In the main square where the house-fronts are most battered and the big electric-light standard bows itself to the earth, I saw a girl bargaining for some buttons on a card at a shop-door — hands, eyes, and gesture, all extravagantly employed, and the seller as intently absorbed as she. It must be less distracting than one thinks to live under the knowledge one is always being watched from above — breathed upon in the nape of the neck, so to speak, by invisible mouths.

A little later I was being told confidentially by some English woman among a garden of irises, who owned a radiographic installation and a couple of shrapnel-dusted cars, that they had been promised, when the push came, that they and their apparatus might go into Gorizia itself, to a nice underground room, reasonably free from shells which disconcert the wounded and jar the radiograph, and 'wasn't it kind of the authorities?'

THE RIDGE OF THE WAITING GUNS

The amazing motor-lorries were thicker on

the more amazing road than they had been. Our companion apologised for them. 'You see, we have been taking a few things up to the Front in this way in the last few days', he said.

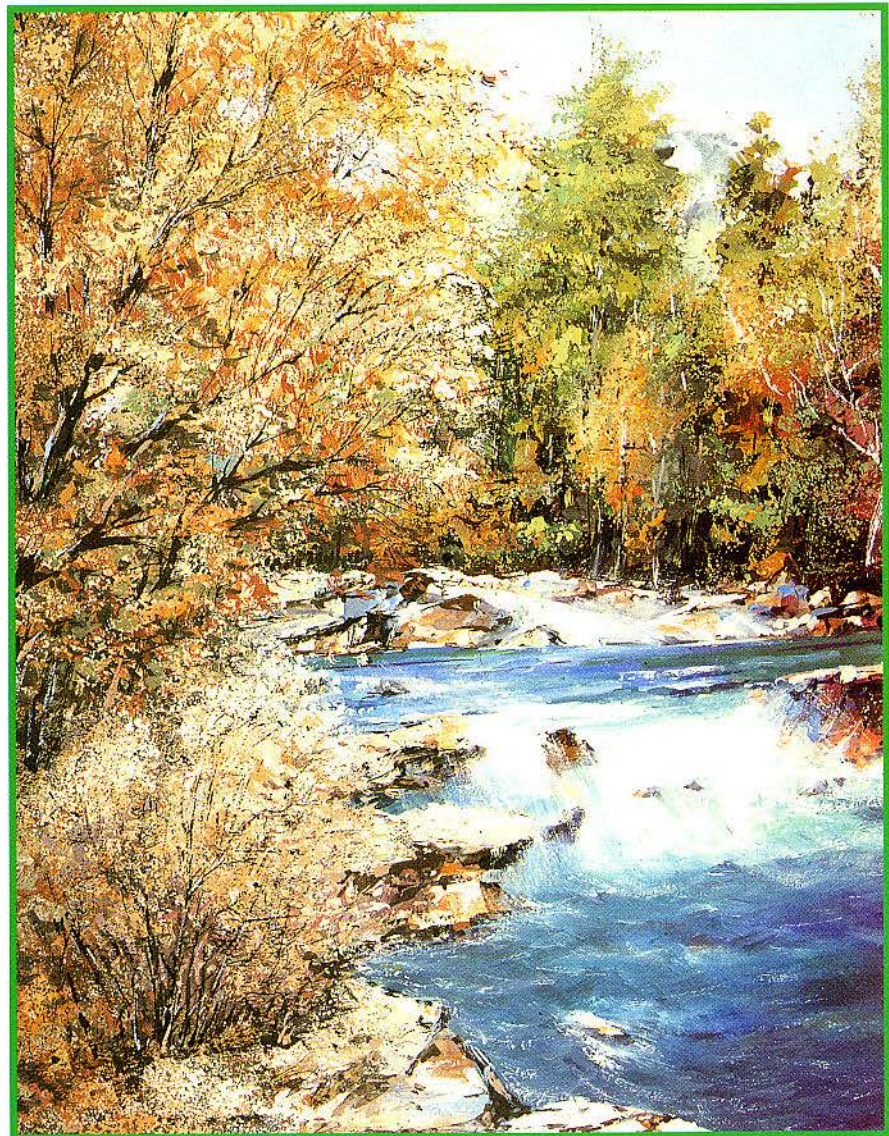
'Are all Italians born driving motors?' I demanded, as a procession of high-hooded cars flopped down the curve we were breasting, pivoted on its outside edge, their bonnets pointing over a four-hundred-foot drop, and slid past us with a three-inch clearance between hub and hub.

'No', he replied. 'But we, too, have been at the game a long time. I expect all the bad chauffeurs have been killed'.

'And bad mules?' One of them was having hysterics on what I thought — till I had climbed a few thousand higher — was the edge of a precipice. 'Oh, you can't kill a mule', and sure enough, when the beast had registered its protest, it returned to the dignity of its sires. The muleteer said not a word.

We bored up and into the hills by roads not yet mapped, but solid as lavish labour can make them against the rolling load of the lorries, and the sharp hoofs of the mule, as well as the wear and tear of winter, who is the real enemy. Our route ran along the folded skirts of a range not more than three or four thousand feet high, more or less parallel with the Isonzo in its way from the north. Rivers that had roared level beside us dropped and shrunk to blue threads half visible through the forest. Mountains put forward hard shaly knees round which we climbed in a thousand loops that confused every sense of direction. Then, because the enemy seven miles off, could see, stretches of the crowded road were blinded with reed mats while torn holes above or below us proved that he had searched closely.

After that, the colossal lap of a mountain alive with dripping waters would hide us in greenery and moisture, till the sight of a cautious ash-tree still in bud — her sister ten minutes ago had been clothed from head to foot — told us we had risen again to the heights of the naked ridge. And here were batteries upon batteries of the heaviest pieces, so variously disposed and hidden that finding one gave you no clue to the next. Elevens, eights, fours — sixes, and elevens again, on caterpillar wheels, on navy mountings adapted for land work, disconnected from their separate tractors, or balanced and buttressed on their own high speed motors, were repeated for mile after mile, with their ammunition caves, their shops, and the necessary barracks for their thousand servants studded or strung out on the steep drop behind them. Obscure pits and hollows hid them pointing to heaven, and how they had been brought up to be lowered there passed imagination as they peeped out of the merest slits in green sod. They stood back under ledges and eaves of the ground where no light could outline them, or became one



with a dung-heap behind a stable. They stalled themselves in thick forest growth, like elephants at noon, or, as it were, crawled squat on their bellies to the very bows of crests overlooking seas of mountains, they, like the others down the line, were waiting for the hour and the order. Not half-a-dozen out of a multitude opened their lips.

When we had climbed to a place appointed, the shutter of an observation-post opened upon the world below. We saw the Isonzo almost vertically beneath us, and on the far side were the Italian trenches that painfully climbed to the crest of the bare ridges where the infantry live, who must be fed under cover of night until the Austrians are driven out of their heights above.

'It is just like fighting a burglar across housetops', said the officer. You can spot him from a factory chimney, but he can spot you from the spire of the cathedral — and so on'.

'Who sees those men down yonder in the trenches?' I asked. 'Everybody on both sides, but our guns cover them. That is the way in our war. Height is everything'.

He said nothing of the terrific labour of it all, before a man or a gun can come into position — nothing of the battle that was fought in the gorge below when the Isonzo was crossed and the Italian trenches clawed and sawed their way up the hillside, and very little of the blood-drenched snout of the height called the Sabotino that was carried, lost and recarried most gloriously in the old days of the War, and now lay out below as innocent-seeming as a mountain pasture.

They are a hard people, these Latins, who have had to fight the mountains and all that is in them, metre by metre, and are thankful when their battlefields do not slope at more than forty-five degrees.

A PASS, A KING, AND A MOUNTAIN

A falcon swooped off the hill-top and hung below us searching the valley at the head of the pass, which was a broad grassy funnel dipping out into space, exactly like the Mutianee behind Simla. The usual roughly paved caravan track led over it between hummocks of board, rock, and earth, whence it seemed only right that Hillmen would presently come out with brick-tea. But it was a gunner with kindly offers of coffee — a weather-worn commander whose eyes were set to views of very distant horizons. He and his guns lived up there all the year, and on the highest grazing-grounds on either side of his lair were black shell-holes by the score, where the enemy had hunted for him. The snow had just gone, neatly turning in the winter-killed grass-stems around the edge of the older shell-holes as it melted away. This Commandant, like the others, controlled an observation post. When he clicked back its shutter, we looked down as the falcons do, into an Austrian town with a broken bridge over a river, and lines of Italian trenches, crawling towards it across river flats — all laid out mapwise, three thousand feet below. The town waits — as Gorizia waits — while decisions of which it knows nothing are being taken overhead, whether it shall live or die. Meanwhile, the Commandant pointed out its beauties, for it was his possession, you see, by right of eminent domain, and he dispensed the high, the low, and the middle justice over it.

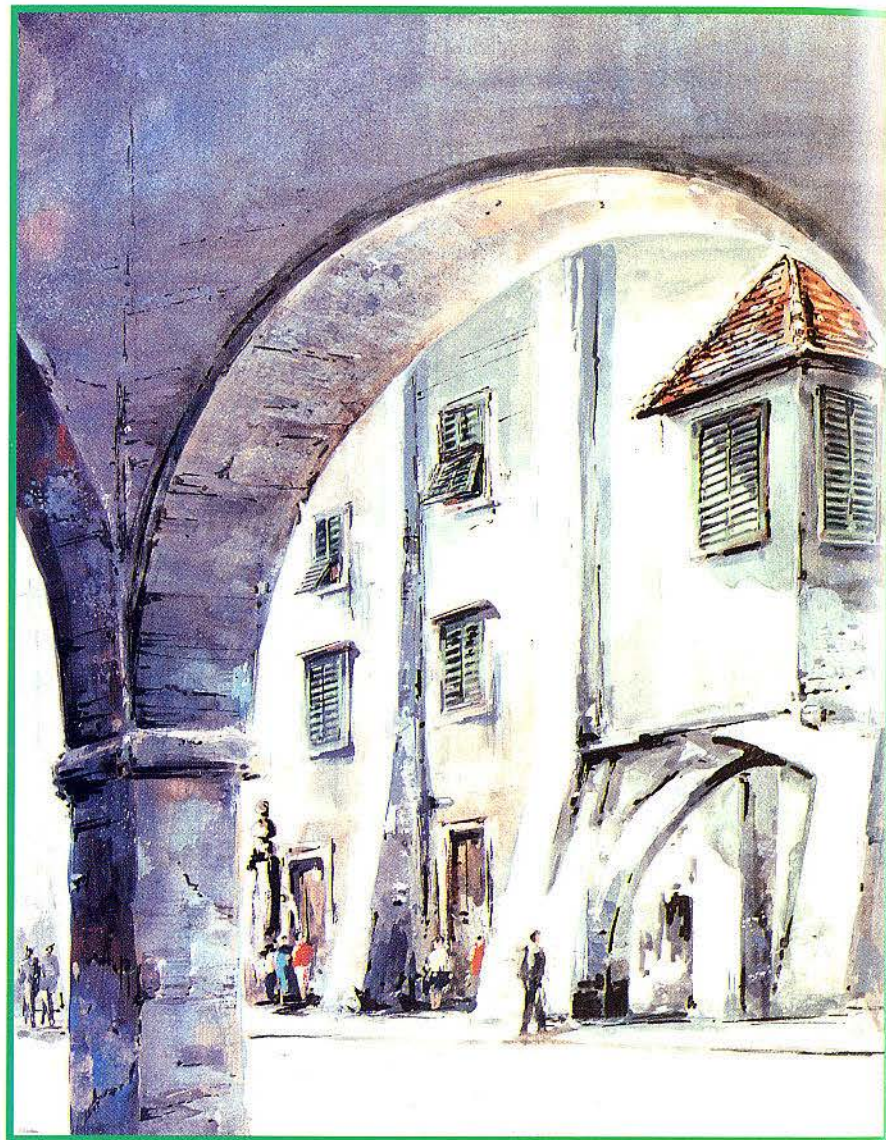
When we were at coffee, a subaltern came with word that the Austrians, ten thousand metres away, were shifting something that looked like a gun. (Guns take all sorts of shapes when they have to be moved). The Commandant excused himself, and the telephones called up observers laid out somewhere among the tangled steepes and hanging woods below.

'No', he said presently, shaking his head, 'it's only a cart — not worth a shot just now'.

There was much bigger game afoot elsewhere, and I fancy that the orders were not to flush it too soon.

The keen wind whooped over the grass and drummed on the boards of the huts. A soldier at a bench fitted nails into his boot, and crooned to himself as he tapped. A blast or two exploded somewhere down the new-made screened road along which we had come, and the echoes clamoured through the valley. Then a motor-horn with a distinctive note rang fierce and piercing.

'That's the King's bugle', some one said. 'He may be coming here. Listen. No... he's going on to look at some of the new batteries. You never know where he'll turn up, but he's always somewhere along the line,



and he never leaves anything unseen'.

The remark was not addressed to the private with the boot, but he grinned as men do at the name of a popular general. Many pleasant tales are current in his armies concerning the King of Italy. The gist of them all is that he is very much of a man as well as a statesman. Kings and ammunition-dumps are fair targets for aeroplanes, but, if the tale be true, and it squares with all the others, there is one King at least who shoots back and shoots straight. No fear or circumstance distinguish him from any other general in field kit, down to the single ribbon that testifies to a year's war service. He moves temperate, loyal, keen, in stark simplicity among his men and full hazards of war.

All that day a triangular snow peak had risen like a master wave, now to one side, now to the other, of our road. On the steepest slopes of its topmost snows it carried a broad, open V, miles long on either

limit, which appeared in the changing lights like a faint cattle-brand, or giant ski-tracks, or those dim canals of Schiapparelli which mark the face of the red planet Mars. That was Monte Nero, and the mark was the line of the Italian trenches on it. They are cut through snow that melts, into packed snow that never melts, into packed snow that never softens; and where the snow cannot lie on the sheer rocks, they are blasted in and out among the frost-ridden rubbish of the mountain crest. Up there, men fight with field-guns, machine-guns, and rifles, and more deadly shoots of stones heaped together and sent sliding down at the proper time. Up there, if a man is wounded and bleeds only a little before he is found, the cold kills him in minutes, not hours. Whole companies can be frostbitten and crippled even while they lie taking cover in the pauses of a rush, and the wandering mountain gusts take sentries from under the lee of their rock as they



stand up to be relieved, and flick them into space.

The mountain draws its own supplies and troops for miles and miles back, over new roads that break off from the main arteries of traffic and split into mule-trails and man-tracks, emerging, at last, against the bare rocks, as thin and threadlike as the exposed roots of a botanical diagram to illustrate capillary attraction. There has never been a greater work of invention, preparation, and

endurance among fantastic horrors than the winning and holding of this one post. And it has passed almost unnoticed by nations, each absorbed in its own hell.

'We climbed! We climbed! We carried the approaches. Now we are up there, and the Austrians are a little to the right just above that sinking cloud under that cliff. When they are dislodged we get full command of that height, etc., etc. The officer spoke without emotion. He and a few million

others had been goaded out of their known life to achieve the incredible. They had left the faculty of wonder at home with the pictures and the wallpapers and the unfit.

Armies and avalanches

'But if you make a road, you must make a road', the officer insisted.

'Admitted. But can all these tremendous works be necessary?'

'Believe me, we do not lay one stone more than we have to. You are seeing the roads in spring. We make them for winter in the mountains. They must be roads to stand everything'.

They clung to the hillside on hanging arches of concrete, they were riveted and sheathed thirty or forty feet down with pointed masonry; protected above by stonewallings that grew out of the rock itself, and above that again, by wing walls to part and divert uneasy snow-slides or hopping stones a quarter of a mile uphill. They were pierced by solid bridges and culverts at every turn where drainage might gather, or flanked with long aprons of pitched stone, where some mountain's soaked side slid down in broad fans of stony trash which, when the snows melt, delivers sudden blasts of racing pebbles and water.

Every few hundred yards on the road were the faithful old man and the boy, the stone-heap and the spade, and the twenty-mile-an-hour lorries rolled as smoothly over the flawless surface as they had in the plains.

We passed a Touring Club notice, of peace times, bidding people 'pay attention' to avalanches. A tangle of pines, snapped like straws underneath one drunken boulder about the size of a house, underlining the warning.

'Yes, before the War, people used to whisper and hold their breath when they passed some of these corners in winter. And now! Hear what a noise that string of cars makes in these gorges! Imagine it in winter! Why, a single motor-bus sometimes would start an avalanche! We've lost many men that way. But transport can't stop for snow'.

It did not. We ran, as the lorries ran, into patches of melting snow, fringed with gentian clumps, heath, and 'crocus! These patches thickened to sheets, till at the head of a pass we found ten foot of packed snow, all newly shovelled back from the dry, perfectly graded road-bed. It trailed after us brokenly, through villages whose gutters danced with bright water, and closed up abreast of us in sheets once more when we reached Cortina.

This was an ex-health and pleasure resort, which of late belonged to the Austrians, who filled it with 'new-art' hotels, each more villainous in design than its neighbour. Today, as the troops and transport come and go, the jigsaw and coloured-glass atrocities

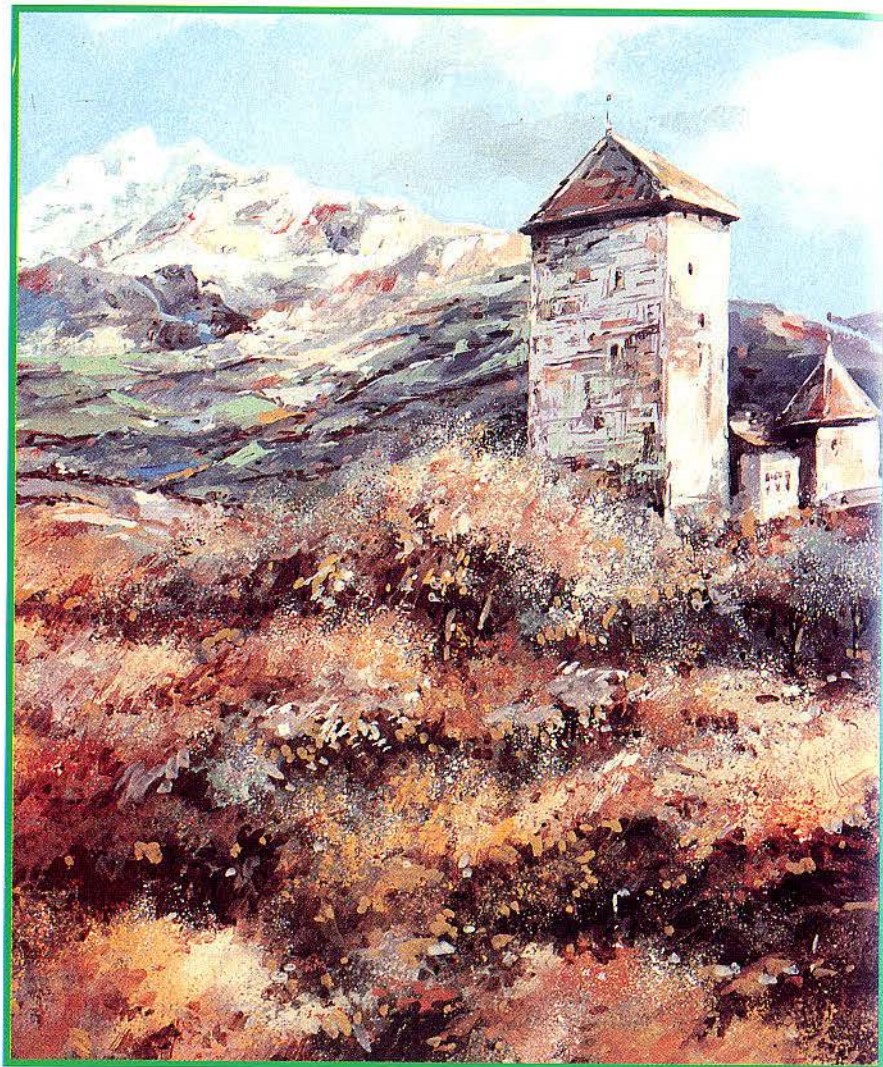
look like bedizened ladies, standing distracted in the middle of a police raid. The enemy do not shell the hotels much, because they are owned by Austrian heyducs who hope to come back and resume their illustrious trade?

In the old days, whole novels were written about Cortina. The little-used mountains round made an impressive background for love-tales and climbing adventures. Love has gone out of this huge basin of the Dolomites now, and the mountaineering is done by platoons in order to kill men, not by individuals who read papers before Alpine Clubs.

On most of the other Fronts war is waged in hot contact with all man's work and possessions. The slayer and the slain keep each other company at least in a world that they themselves created. But here one faces the immense scorn of the hills preoccupied with their own affairs; for between frost, snow, and undermining waters, the hills are always busy. Men, mules, and motors are busy too! The roads are alive with them. They inhabit cities inside dim forests of pine whose service paths are cut through stale snow and whose aisles ring with machinery! They march out, marshal, and distribute themselves among the snowfields above, by whole regiments and arsenals at a time. Take your eye off them for an instant, and they are swallowed up in the vastness of things long before they reach the upthrusting rock walls where the mountains and the fighting begin.

There is no scale to lay hold on. The largest shells make a smudge no bigger than a midge in a corner of a fold of a swell on the edge of a snowfield's bank. A barracks for two hundred men is a swallow's nest plastered beneath the overhanging eaves, only visible when the light is good — the same light that reveals the glancing spider-web of steel wire strung across the abysses, which is the aerial railway feeding that post. Some of these lines work only by night when travelling cradles that hang from the wires cannot be shrapnelled. Others spin and whisper busily all day, against rifts and chimneys of the rock, with their loads of building material, food, ammunition, and the blessed letter from home, or a still burden of wounded, two at a time, slung down after some fight on the very crest itself. From the wire rope and its cradle, to the mule who carries two hundred pounds, to the five-ton lorry or the cart, to the rail-head, is the way of it for every ounce of weight that travels up or down this battle-front. *Except* the big guns. They arrive at their proper place by the same means that Rome was built.

Men explained and re-explained their transport to me, giving weights, sizes, distances, and average allowance per head of troops. Their system is not like ours. It seems to lack our abundance of forms and



checks, as well as palaces full of khakied clerks initialling bits of paper in quadruplicate.

'Oh, but we have forms and paper enough', they protested. 'Any amount of forms. You'll find them in the cities. They don't grow well in the snow here'.

'That sounds reasonable', I replied, 'but it is the infinite labour imposed on you by your mere surroundings that impresses me most of all. Everything you handle seems to end in a two-hundred-pound package taken up the side of a house, and yet you have heavy artillery on the edge of glaciers. It's a new convention'.

'True. But these are our surroundings, and our people are used to them. They are used to getting load up and down hill; used to handling things and straps and gears and harness and beasts *and* stones all their lives; besides, we've been at it for two years. That is why the procession moves'.

Yet I came on one ghastly break in it, nevertheless.

There had been a battery with guns, mules, barracks, and stables complete, established on a mountain side, till it had seemed good to the mountain to brush them away as a woman brushes off snow from her skirt. 'Ninety are down below in the valley with the mules and the rest. Those we shall never find. How did it happen? A very little thing starts an avalanche when the snow is ripe for it. Perhaps a rifle-shot. And yet,' he added grimly, 'we must go on and shake all this atmosphere with our guns. Listen!'.

There was nothing doing, at the moment, on this front any more than the others — only a hidden piece here or there answering its opponent. Sometimes the discharge sounded like a triumphant whoop across the snows! Then like the fall of trees far off in the thick woods! But it was most awful when it died down to a dumb beat no louder than the pulse of blood in one's ears after a climb, or that hint which a mountain-slide might give before it chose to move into action on its own account.



A LITTLE-KNOWN EVENT OF THE SECOND WORLD WAR

THE EMPLOYMENT OF COSSACKS IN ITALY

There are many events which concerned our territory during the second World War: the echo of some of these has spread far and wide: others are still little known, but deserve mention for the decisive influence they had on facts and local situations. Among the latter, the employment of atypical forces, used by German High Headquarters to carry out counter-guerilla warfare and the surveillance of particularly sensitive areas.

An important example is given by the co-operationist Units, of Russian origin, sent to northern Friuli and Carnia in the summer of 1944 and operating there to the end of the war.

Militarily speaking, historians have not given much importance to the fact and the specific documentation is incomplete and fragmentary. We are grateful, therefore, to those journalists and scholars who, through careful surveys and analyses, have spotted out the salient aspects of the problem and brought them to the attention of public opinion.

Our gratitude must also go to the following:

- the heroic combatants of the Resistance who through their reports have given us a realistic picture of the situation;

- the village parish priests who wrote on the pages of their little diaries unheard of particulars of that strange occupation as well as the dramatic consequences which the population had to undergo;

- all those who lived that terrible period intensely and whose testimonies informed on facts and episodes of the utmost interest.

A survey on the employment of Russian collaborationist Higher Units (formed mainly by Cossacks) in the north eastern Italian sector when the war was almost at an end was carried out on the above elements.

THE NATURAL ENVIRONMENT

The lack of specific datum-points makes the definition of the area concerned rather hazardous. Moreover, the location of Headquarters and Cossack units in Italy followed rather vague schemes, often conditioned more by personnel survival requirements than by the need of dividing the territory. This in the initial stage at least.

Later, when more precise tasks were defined and criteria of employment which will be dealt with further on were adopted, deployments underwent further changes and a more or less definite asset was reached.

Given the above, it seems better to consider only those areas which were more involved and which are the following:

- **Northern Friuli**, that is the flat country north of Udine — from the pass of Venzone to all the morainial amphitheatre of the Tagliamento — as well as the southern ramifications of the Julian PreAlps (the Torre and Cornappo Valleys);

- **the Carnic PreAlps**, with particular reference to the Cellina, Meduna and Arzina valleys and their outlets in the plain of Friuli;

- **the basin of the northern part of the Tagliamento**, that is the whole of Carnia.

Morphologically speaking, the area is characterised for at least 3/4 by its vastness, the presence of impervious and rough terrain where narrow, bending valleys follow one another. These are covered by thick forests where viability is scarce. Militarily speaking, it is quite suitable for guerilla warfare, but rather difficult to control.

Moreover, it must be mentioned that at that time:

- the network of roads for vehicles was not very developed;

- excluding the Venice-Udine-Villach-Vienna railway line and the Osoppo air-field (only partially used) there were no military objectives of any importance. The industrial plants, so numerous today, were then almost inexistent;

- the number of inhabitants was definitely higher than at present and the built up areas had almost reached the highest receptivity due to the evacuees from the big cities of the plain where air bombings had made conditions of life very precarious;

- natural resources consisted only in agricultural products and those derived from cattle reared according to family management.

On the contrary, the following routes of communication were of the utmost importance:

- **state road No. 13 "Pontebbana"** and the above mentioned railway line which, through the Coccau pass (near Tarvisio) reached Austria. At that time, the above, excluding the Brennero line, formed the most important supply and clearing axis between the Italian territory and Central Europe;

- **state road No. 52 also called "Carnica"** which, through the Mount Croce Carnico pass doubled it (though its capacity was far lower);

- **state road No. 52 "Carnica"** and the provincial road of the Degano Valley which, respectively, through the Mauria and the Cima Sappada passes formed the main links between Carnia and Cadore.

THE SITUATION

In Autumn 1943 the above area was englobed in the Adriatisches Kustenland (Adriatic coast), that is in the Operational Sector which German Higher Headquarters had established to have complete jurisdiction over the provinces of Udine, Gorizia, Trieste, Pola, Fiume, Lubiana and Quarnaro. Here, following standards already adopted in other occupied areas, the protection of the main inhabited areas and the static defence of militarily interesting objectives was assigned to units of the *Wehrmacht*, supported by

elements of the *Italian Social Republic*. The task of repressing acts of sabotage and intervening within short and medium range, was entrusted to parties kept constantly under control and formed mainly by SS.

While months went by, however, the partisan movement became more and more important and the armed nuclei whom the German General Staff did not consider very dangerous, changed into ruthless formations.

Hundreds of patriots, gathered in the "**Osoppo**" and "**Garibaldi**" Brigades, started making their presence known and created a series of problems to the Nazi Authorities of the Adriatic Coast.

Attacks on barracks and deposits, sabotages to communication lines, sporadic actions designed to create a climate of constant insecurity, followed endlessly everywhere despite the harsh and ruthless reprisals carried out in various places.

In such a situation, even the state road "**Pontebbana**" and the nearby railway network, headquarters of the main troop and strategic material movements, soon became scarcely reliable.

The Allies themselves, aware of the contribution the guerrilla warfare gave to the general development of operations, began supplying the combatants of the Resistance by air drops.

The movement, which according to reliable data involved about 6000 men, reached the peak of success in August 1944 with the establishment of the "**Free area of Carnia and Friuli**".

The above Area, totally under partisan control, included:

- most of the Carnic PreAlps, from



Right

Two officers: one is wearing the German uniform and the other the traditional Cossack full dress uniform.

Mount Rest to Mount Cavallo;

- the whole of Carnia, with the exception of the Tolmezzo valley (that is also the eastern extension to where the Tagliamento river joins the Fella river) which was strongly occupied by the Germans;

- the Sappadino in northern Cadore.

When the situation precipitated the Germans had to study new measures to solve the following problems as quickly as possible:

- obtain once more the control and freedom of action on the whole area before a further development of the partisan formations (which, besides increasing the hovering threat, feared a union with Tito's Slovenians — operating on the East — and the resulting establishment of a dangerous "southern front" in correspondence to the border line);

- occupy, in close succession of time, all the main inhabited areas and have them garrisoned by suitable forces. This with the obvious aim of preventing the re-birth of the insurrectionary movement.

It was thus decided to carry out a complex mopping up action, brief but decisive. This operation was assigned to the above mentioned manoeuvre parties adequately strengthened by units of various origins and with the support of units and means granted temporarily by other operational sectors. In this way the first problem could be solved. The second problem, conditioned by the availability of consistent forces, presented a certain amount of difficulties (it must be remembered that at the time the III Reich was carrying out its last, precarious resistance on various fronts).

It was thus decided to employ collaborationist Units which would satisfy the particular requirement even though they were not reliable enough to be directly opposed to the Anglo-American-Russian offensive.

On the basis of the above, the **Ataman Operation** was taken into serious consideration. This consisted in a Plan, elaborated in 1943, to move the Cossack and Caucasian Divisions from **Eastern Prussia** and **Poland** to the **Adriatic Coast**.

THE LEADING CHARACTERS

The image of the Cossack has always fascinated the people's imagination. It reminds us of the features of a fierce warrior who crosses the Steppe at full gallop in a halo of glory, the leading character of a thousand legendary adventures. Here, however, we have to adapt the Cossack's identity to the event considered.

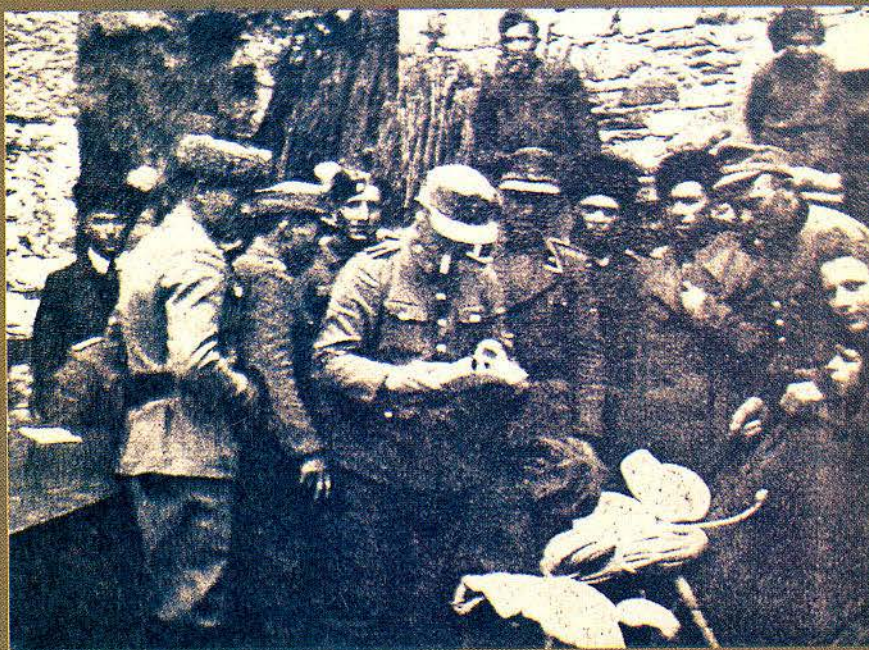
In fact, the Cossack of the **Don**, the **Kuba**, the **Terek** and other places (mainly Christian-Orthodox) and the Northern Caucasians (of Moslem faith) who came to Italy in the summer of 1944, though heirs to that mythical race celebrated by history books and well-known novels, are only an



Cossack soldier with pistol and Cossack sabre.



Cossack Officer in full dress uniform.



Mountain men of the Cossack Division of general Sultan Ghirel Klitsch. Pesariis 9.1.1945.

episode of the collaborationism which in more or less apparent forms concerned all the countries occupied by the III Reich.

It is enough to think of the number of Russians within the German military apparatus, which may be reckoned in over a million (this at least is the figure supplied by reliable sources).

Such a big formation consisted of the following:

- thousands of exiles, among which many Officers of the Czar who had found refuge in other Countries after the revolution (particularly in France);

- hundreds of thousands of war prisoners whose choice had not come so much from political reasons, but from the wish to get out of the **concentration camps** where life was unbearable and hunger reigned. At first, this wish had urged them to work for Hitler



A Cossack convoy leaving Tolmezzo.



A Cossack Officer wearing a German uniform.



Young Russian soldiers with Cossack sabre.

and later had convinced them to take up arms in the latter's favour;

- members of entire communities hostile to Bolshevism who, since 1941, had welcomed the Germans as liberators and, though operating in their land of origin, had become the Germans' close co-operators. Later, the Red Army's counter-offensive had made them emigrate across the border and further to the West. Their seriously com-

promised position offered no other alternative.

In the presence of such a considerable number of people (and, in a certain sense, considerable quality too) the introduction of Russian units within the *Wehrmacht* soon became a reality.

The highest percentage of the above units was designed to give birth to the ROA (Russian Liberation Army) under General An-

dreï Andreievitch Vlassov (heroic combatant of the Soviet Army who, after being captured prisoner, had decided to espouse the Nazi cause). Actually, Vlassov's ambitious plan was not fully fulfilled. Most of the troops, equipped, armed and trained according to the German pattern, were employed (generally as battalions) in counter-guerilla warfare and in subsidiary activities in the most disparate places and always at the orders of German Commanders; (nowadays, in the valleys of Piedmont and Veneto, memories of **Mongolians** within the SS formations carrying out dramatic mopping up actions are still alive).

The remaining party had different features. In fact, though it respected some kind of military organization, the groups that formed it could be compared more to tribes than to organized units. There was a chain of command, no doubt, the regiments were formed by faithful custodians of legendary traditions, but a heterogenous crowd of relatives, priests, artisans and traders always followed the combatants; indeed, all those who belonged to the respective communities, proud of their choice and aware that their survival was closely bound to that of the bravest men. The above communities together had given rise to the **Higher Cossack and Northern Caucasian Units** which, after having been somehow re-organised, had been placed in the chosen areas of Europe awaiting future, appropriate employment.

The above units had been guaranteed protection and various acknowledgements. They had also been assured that at the end of the war and after Germany's victory (in which the Cossacks firmly believed) they would return to their lands of origin with a large amount of self-sufficiency.

While the general situation worsened, initial agreements underwent changes and adjournments. The **Ataman Operation**, studied in all its details, was officially communicated to the party concerned with the announcement of a high-sounding proclamation which, among other things, stated the following:

"IF THE VICISSITUDES OF WAR SHOULD MAKE YOUR RETURN TO THE LANDS OF YOUR ANCESTORS TEMPORARILY IMPOSSIBLE, WE SHALL GIVE RISE TO YOUR LIFE AS COSSACKS IN OTHER PARTS OF EUROPE, UNDER THE FUHRER'S PROTECTION, AND MAKE THE LAND AND EVERYTHING NECESSARY FOR A SELF-SUFFICIENT LIFE AVAILABLE TO YOU".

This was soon followed by a change in the location of forces. The first contingent (which may be defined "Balcan") (1) was sent to Yugoslav territory to face Tito's formations which represented an ever increasing threat; for the second (which will be dealt with in this article) an order was issued according to which it was moved to Italy and more precisely to northern Friuli. Here, according to agreements and promises, the assigned area would have been called

ORGANIZATION

The lack of official documents does not permit an accurate definition of the number and organizational asset of this unusual *Occupation Force* which occupied our territory. However, on the basis of research carried out so far, we have reached the following considerations:

- though a first estimate speaks of 18,000 Cossacks and 4,000 Northern Caucasians, in the Spring of 1945, the presence of Russian exiles in the area amounted to about 30,000 people. The increment is justified by the subsequent thronging of isolated units, family nuclei and refugee of various origin;

- the whole of the forces formed the **Cossack Army**, term which, as we shall see later on, was more suited to the rank of Commanders than to the existence of a true and proper Complex Higher Unit;

- it is likely that the following were located in the area:

- a Cossack Division;
- a Caucasian Division;
- a Reserve of Cossack Cavalry (comparable to a Brigade);

- a Georgian legion or regiment (which had come later on and which was assigned permanently as a reinforce);

- a special self-sufficient unit (squadron sized) for the safety of the High Commander in charge.

Under the jurisdiction of Headquarters (directed by a General Officer which in modern terms may be defined "Territorial") there were moreover:

- a Higher War Institute for the professional updating of Cadres;

- the Cossack Cadets School (comparable to the Military Academy for the training of young subalterns);

- a Military Court;

- a Military Bank, for the payment of funds to the staff. The above Bank was periodically funded by the German Authorities of the Adriatic Coast with high grants of currency (that is lire);

- a Body responsible for all activities of **Information and Propaganda**. The above Body also published and circulated a weekly paper in Cyrillic print;

- an undefined number of **logistic units** for supplies of various kinds;

- an undefined number of **Refugee Centres** to assist Russian civilians who, though not belonging to officially acknowledged communities, had followed the troops along their exodus.

In conclusion it must be mentioned that the soldiers' relatives and all those who were somehow part of the community, formed the **civilian component** of the units and were thus organised within them.

As regards the division within the Higher



Camels in a Carnic village during the Cossack occupation.

Units there are still doubts and confusion. Different customs, the atypical origin of the units, the splitting up which took place when the various inhabited centres were occupied, are all elements which make understanding very difficult. However, we have been able to clear the following:

- the Divisions englobed regiments (commanded by Colonels and having from 800 to 1100 soldiers) numbered in progression and marked by the name of the region of origin (2);

- in the Cossack regiments, notoriously Cavalry, the lowest organizational level was represented by squadrons (called, according to tradition, *century*) while in the Caucasian regiments, which also included Infantry units, there were battalions and detachments (the latter comparable to companies).

The above information describes what might have been the most probable organizational asset, but it is generally believed that, when necessary, task units were employed (patrols and, as one would call them today, tactical groups). These would be headed by very important Officers, endowed with charisma in the eyes of subalterns.

Particular mention must be made of the Officers, the true backbone of the whole organization. They represented both the "gentleman of olden times" and the "head of a company of soldiers".

Haughty and unconcerned when commanding in the garrison, dignified in their contacts with civilian life, brutal and fascinating in the performance of military operations, most of them knew German well enough and many of them were fluent in French.

Within the units the chain of command was carefully followed. Particular respect was reserved to Generals and Higher Officers. Among the latter, many came from the Cadres of the Czarist Army and, after over twenty years' exile they enjoyed the power

given to them by the re-gained position.

Generally speaking, they were rather old (some of them were 80 years old) but, by virtue of the experience obtained in so many vicissitudes, they were entitled to a kind of pre-emption right during the most important meetings held by the Higher Headquarters.

Respect became almost reverential as regards the **Atamans** who were of noble origin and it was believed that their dynasty was somehow linked to the Imperial Court of the Czars. They occupied the highest ranks of the chain of command or posts of vital importance.

Though it lived and worked under conditions of apparent self-sufficiency, the so-called **Cossack Army** was always subject to controls by the German Authorities by means of the following:

- **Liaison parties**, supported by Higher Unit Headquarters. The former, led by junior officers of the Wehrmacht (and this did not please the above mentioned senior officers) carefully followed every activity and had a large power of decision;

- **Units of the SS**, located in some inhabited centre where their presence was deemed necessary for particular police operations.

EQUIPMENT-WEAPONS AND VEHICLES

The above mentioned atypical character of the Cossack formations, is further confirmed by the analysis of certain elements designed to define the true image of our "leading characters".

The first element concerns the appearance, that is the uniforms worn by military per-

sonnel which, due to their dissimilarity, could hardly be considered "uniforms".

It must not be forgotten that the warlike soldiers on issue had been living in a state of semi-captivity and that their reorganization into units had not been carried out with a particular care of details. The Germans had allotted them "second choice" equipment or equipment coming from the booty of enemy armies. The German uniforms had not been renewed and, in time, outfits were integrated by objects recovered from other uniforms.

The result was that soldiers wore rather odd uniforms and to see someone wearing a German coat over Russian trousers (or Polish, Norwegian, etc.) was not the exception, but the rule.

Besides the rank, usually worn on the epaulettes, the Eagle of the III Reich (sewn on the right breast pocket of the coat) stood out on these uniforms, which may somehow be compared to today's "battle dress".

The headgear deserves mention. In fact, though it was considered normal to use service and peaked caps belonging to German or Russian police, many soldiers wore the busby made of lambswool. That of the Cossacks was high and stately while the Caucasians' busby was smaller.

On the higher part of the busby and on the trouser bands, trimmings were embellished by the traditional colours of the regiments. Moreover, almost everyone wore dark leather boots.

The Cossacks' full dress uniform, made of heavy dark cloth with leather trimmings, cartridge-belts and gold and silver embroidery, was worn on particular occasions and during Corps festivities by Officers and senior elements of the troop.

Weapons too were affected by the above mentioned conditions. German and Czechoslovakian made rifles, machine pistols and Parabellum, light machine guns and machine guns already employed by half of Europe's armies, formed the main armament of the units. Artillery was limited to a small number and, in any case, was of small calibre or antitank. A small number of light and medium mortars completed the allotted equipment.

There were many daggers and sabres, threateningly displayed as instruments of war but, according to tribal customs, used chiefly for practical purposes such as cattle slaughtering, the preparation of fodder for the horses and the cutting of fire wood.

As regards vehicles, the situation showed rather unusual aspects. In fact, a very modest vehicle depot formed chiefly by old German cars and tanks coming from the requisition (some were gas generated), was opposed by an enormous quantity of horses. Recent data confirm the presence in the area of no less than 6,000 horses of which: two thirds mounted by those belonging to the various Units, the remainder employed to draw wagons which carried both materials and

personnel of the various auxiliary categories (civilians included). "Pack" transport was guaranteed by an undefined number of mules and by about fifty camels allotted to a unit coming from the Astrakhan region.

LOGISTICS

It would be rather utopian to speak of a logistic organization as conceived nowadays.

The Germans had granted **full powers** to the Cossacks, aware of their position as "hosts" and immediately took advantage of this guaranteeing their survival with methods based on atavic customs.

The problem of billeting personnel and giving shelter to horses was solved rather hastily. Buildings which were suitable as regards capacity and functionality were totally occupied after having cleared them of their legal inhabitants and sometimes the families living there were forced to live with parties of soldiers (followed, of course, by their relatives).

This permitted a capillary settlement and no inhabited area was spared.

Supplies followed similar criteria. Local resources were exploited without much discrimination by means of requisition or confiscation of everything necessary to sustain personnel and horses.

The burden on local population (whose conditions of life were already very poor) was extremely heavy. To realize the proportions of the plight, it is enough to remember that in Carnia, in the period examined, more than 1,000 head of live stock were lost together with 1,500 tons of hay.

Only towards the last months of the occupation were **supply Centres** established for materials which could not be found on the spot and which came from the plain of Friuli by intercession of the Quartermaster of the Adriatic Coast. The above provisions, however, did not bring about great changes in the described situation.

THE OCCUPATION

The presence of Cossacks in Italy (generally meaning also people belonging to other communities and considering that they formed three quarters of the whole contingent), concerned a period of about ten months subdivided into two different stages:

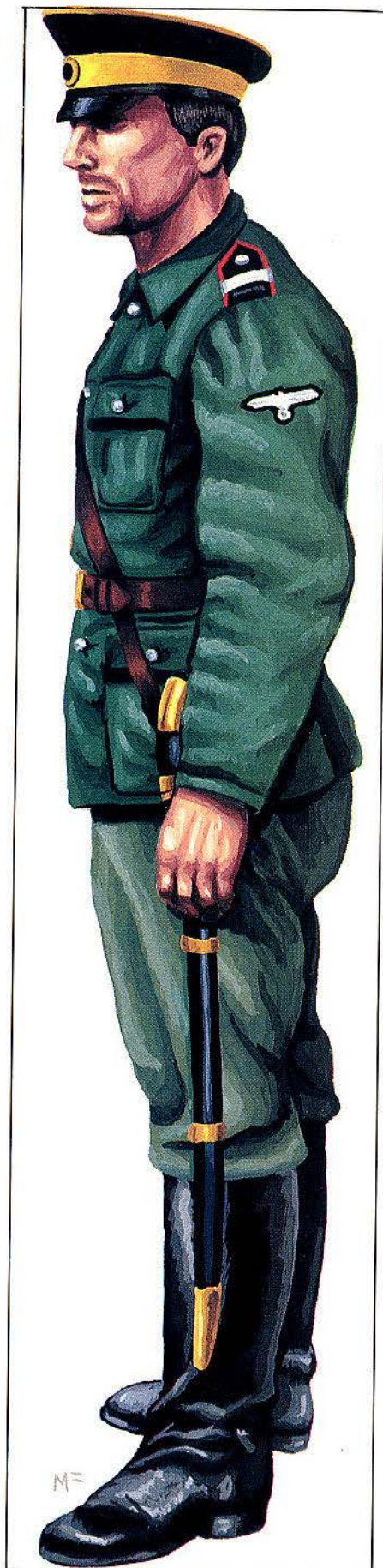
RUSSIA

Corporal of the Siberian Cossacks in the Security Police, 1944.

Uniform: the German uniform was worn with the traditional blue peaked cap with coloured borders and band. The above Cossack corporal wears the SS national emblem on the higher part of the left sleeve.

Equipment: Russian standard troop belt.

Weapons: Cossack sabre of Soviet Russia M 1935.





- the first, marked by the thronging of people and their initial settlement (from about August to November 1944 approximately);
- the second, characterized by the occupation true and proper (which lasted until May 1945).

FIRST STAGE

Besides isolated parties which appeared in 1944, the main contingent of Russian collaborationists arrived only later on.

It appears, in fact, that in the first decade of August about fifty convoys coming from Central Europe, reached the stations of northern Friuli.

The troop-trains, formed mainly by transport convoys and platforms of various kinds unloaded that gipsyish multitude in an atmosphere of undescrivable confusion. Thousands of people (including the old, women and children) tried by the long trip, poured with their wagons onto the plains situated north of the morenial amphitheatre of the Tagliamento, settling in improvised camps.

Deprived of means of sustenance and of any kind of assistance, the Cossacks decided to take care by themselves of all vital necessities. Under the awestruck and surprised look of the local inhabitants, mounted units started searching the countryside and spoil all that was required for their survival. Patrols went as far as the valleys of the Natisone and the southern ramifications of the Carnic PreAlps where, though sometimes faced by partisan actions, they sowed terror among the people.

Episodes of violence and abuse carried out in the regions of Tarconté and Gemona and in the municipalities of Buia and Osoppo (to mention the most famous) were endless and this situation went on throughout the month of September.

Despite the many difficulties, the **Ataman Operation** was completed and the so-called **Cossack Army** reached the initial locations. Thus, according to their plan, the German Authorities decided to attack the **free Area of Carnia and Friuli**. This plan was carried out in the early days of October with a remarkable deployment of forces and means.

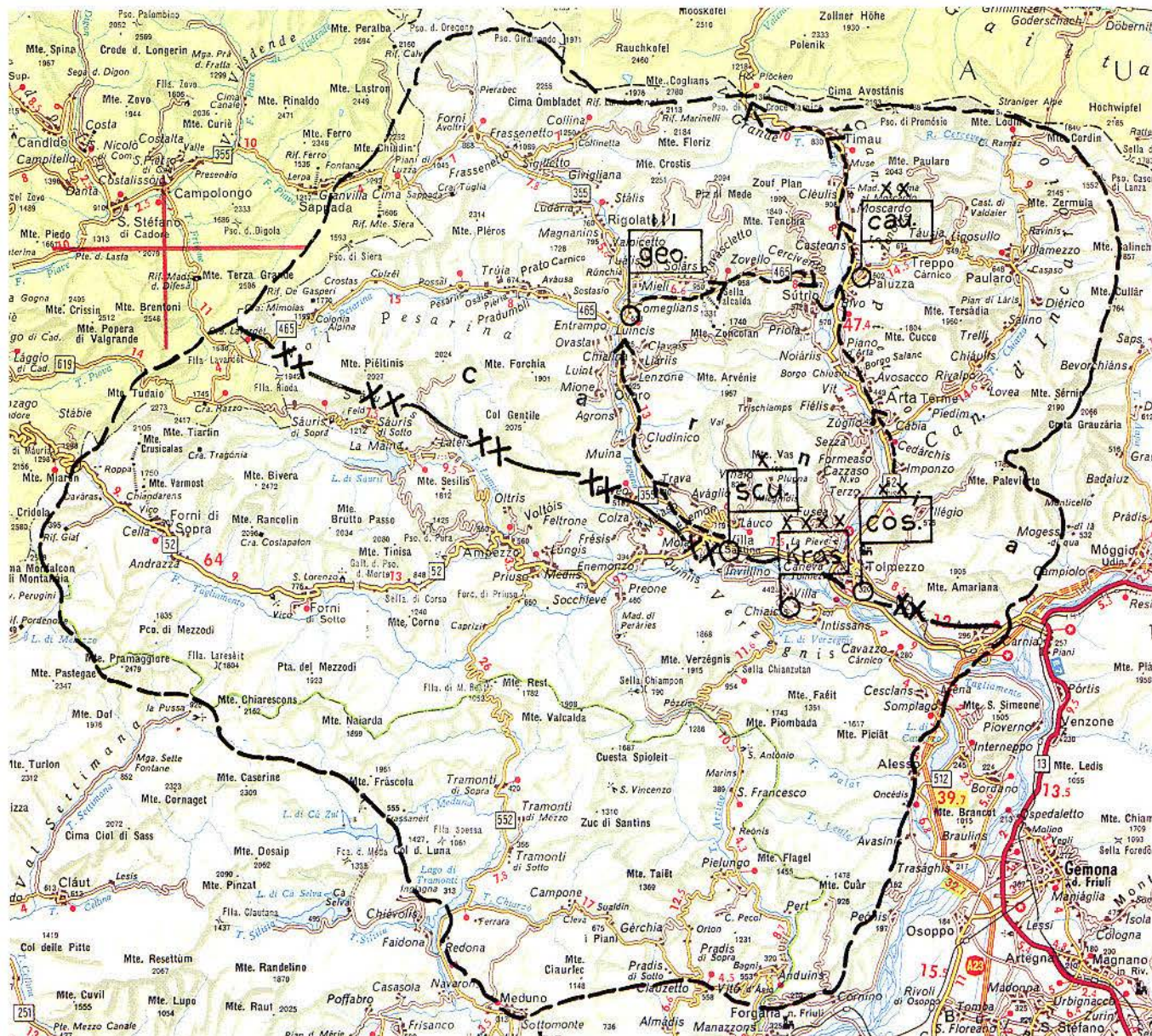
The battle was fought ruthlessly for over

RUSSIA

Lieutenant Colonel, commander of the 5th Cavalry regiment of the Cossacks of the Don, Yugoslavia, 1944.

Uniform: *Komonov* is wearing German rank badges which, though authorised in 1943, were seldom used by Cossack officers who preferred those of Czarist Russia.

Weapons: Cossack sabre or saska, model 1935, Czarist or Soviet, worn on the left hip hanging from the leather belt.



LEGEND

--- Orientative borderline of the "Kosakenland in Italian"

xx
cos.

Location of the Cossack Division Headquarters

xx
cau.

Location of the Caucasian Division Headquarters

iii
geo.

Location of the Georgian Legion Headquarters

x
scu.

Location of the Cadet School

xxxx
KROS

Headquarters of the Great Ataman General

--- Routes followed by the Cossack Units during the flight to Austria (may 1945)

two months and the defence conducted by the partisans was valiant and heroic but, despite the casualties, the Germans managed to restore complete control of the situation.

The first Cossack Cavalry units took part in the imposing mopping up action, though only with subsidiary tasks designed to exploit the success and eliminate the remaining resistance. The event was an important stage towards the settlement of new comers. Soon enough, the bulk of the Cossack and Caucasian units broke into Carnia and, gradually, spread in all directions.

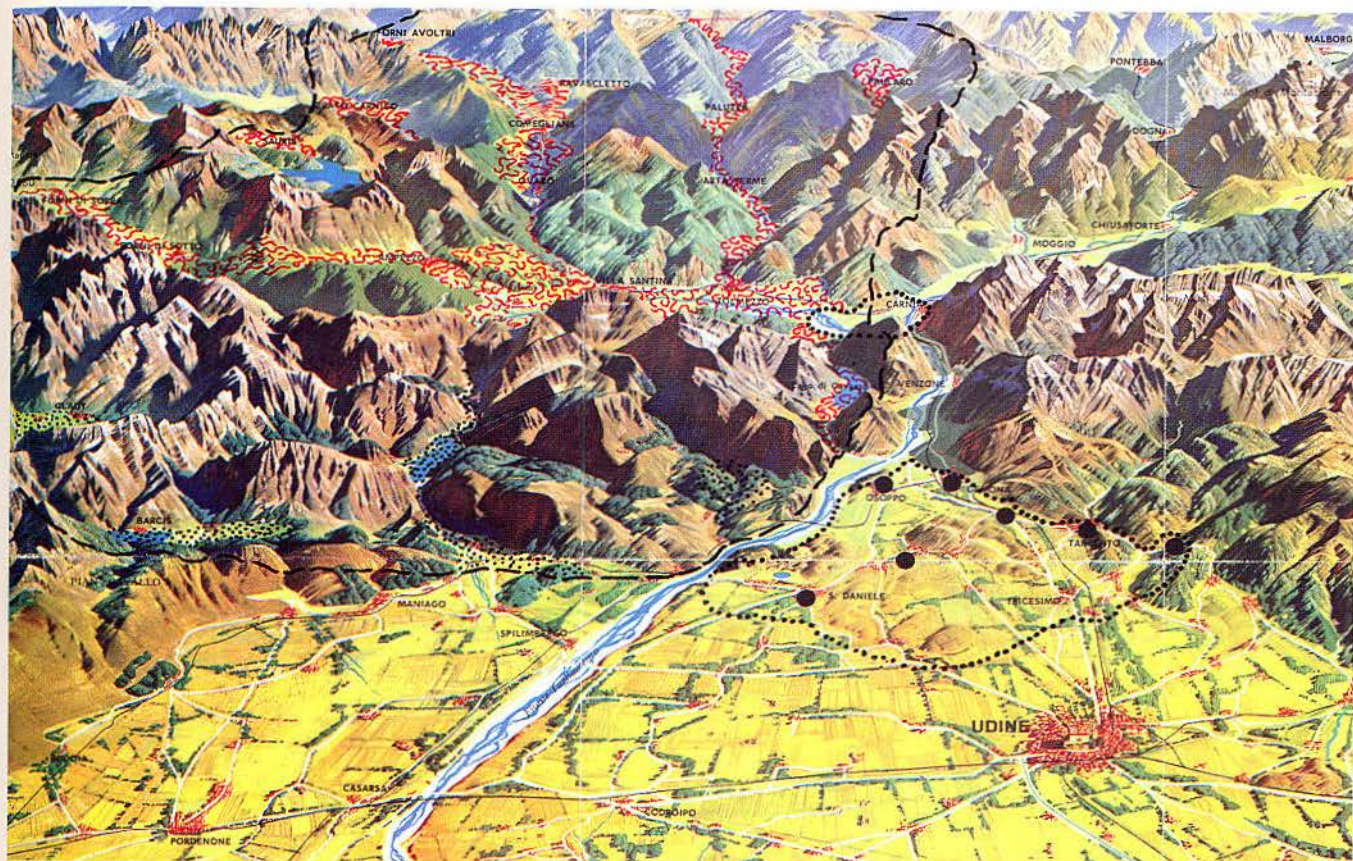
Within a few weeks, all the main centres of the Tagliamento and But valleys, Degano and Chiarzo were reached and occupied and 44 "stanitse" were established (that is garrisons formed by both soldiers and civilians). In close succession of time, the action was extended to the Arzino and Cellina valleys, in more or less the same way.

By early December, all the aims set by the Nazi Authorities of the Adriatic Coast were reached. In fact:

- the organization established by the insurrectionary movement was defeated and the partisan parties, which had escaped retaliation, withdrew to the northernmost part of the region, that is at a remarkable distance from the usual intervention sectors. Moreover, their reduced operational capacity did not allow an immediate renewal of the guerilla warfare;

- the main routes of communication were under close surveillance;

- the massive presence of collaborationist units assured the possession of Kosakenland (meaning Carnia and the nearby valleys) as well as of several other places in the valley, north of Udine (e.g. Artegna, Osoppo, etc.), where the Cossacks had stopped before and where they had left strong surveillance detachments.

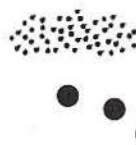


LEGEND

Area of the initial location of the Cossack Higher Units after their arrival in Italy (summer 1944).

Orientative definition of the "Kosakenland in Italien".

Areas occupied permanently



Areas occupied and controlled from time to time.

Centres of the places where Cossack detachments of the plains acted together with Wehrmacht units for logistic requirements.

SECOND STAGE

By now the occupation of Carnia was an accomplished fact and the Cossacks made this quite clear by acting as the most arrogant of masters. There were endless scenes of violence and brutality and the inhabitants of the area, already burdened by a very precarious economic situation, had to meet the requirements of the new comers: from housing to foodstuff, fixing up the refugees and sheltering and feeding the horses.

During the first weeks, abuse reigned together with the most coercive methods. Later, when the ravaging vehemence dwindled, a period of relative peace followed and the forced co-habitation between the population and the occupiers became quite bearable. This, however, did not exclude vandalism and retaliation by uncontrolled groups.

Once settled in, it became necessary to divide the territory and define, orientatively at least, the jurisdictional areas of each Unit.

Following are the essential data regarding the above:

- **Cossack Division:**
 - Commander: "Ataman" General Timofei Ivanovic Domanov.
 - Command Headquarters: Tolmezzo.
 - Area of jurisdiction: southern Carnia (including the entire northern Tagliamento valley) and the PreAlpine valleys. Units of the above mentioned Higher Unit also occupied some villages in the plain (north of Udine) together with Units of the Wehrmacht;
- **Caucasian Division:**
 - Commander: General Sultan Ghirei Klitsch.
 - Command Headquarters: Paluzza.
 - Area of jurisdiction: northern Carnia, including the But valley, Chiazò, Calda, Pesarina and Degano. A Georgian legion, assigned as reinforcement, also operated in the latter locality.
- **The Cossack Cavalry Reserve** with about 3,000 men and most likely commanded by General Andrei Grigorievich Shure (one of the most famous characters, both for his excellent soldierly qualities and his ac-

tivities during the war) acted as manoeuvre party;

- **The main bodies of support** were deployed in a central position. For instance:
 - Higher War Institute (commanded by General S.K. Borodin): Tolmezzo;
 - Cadet School (commanded by General M. Salamakin): Villa Santina;
 - a "Refugee Centre": Lake Cavazzo area.

Gradually, the organizational asset of the "civilian component" also became normal. An Elementary School for about one hundred Cossack children was opened. Several rooms were turned into orthodox churches where religious ceremonies were celebrated periodically. Some craftsmen, such as farriers and saddlers, were given all that was needed to meet the requirements of their specific activity.

As the days went by, however, the partisan movement, having overcome the harsh blows suffered, began showing clear signs of revival. Between January and April 1945, there were endless hostilities between Russian units and partisan parties and many

17 May, 1943

AGENDA OF THE MILITARY CLUB OF THE KUBAN AND DON UNITS O.B.

We, Cossacks of the Kuban and the Don, operating in the ranks of the Italian Army within the "Savoia" Cossack Division met today in this club to commemorate the native land and the ancient glory of free Cossacks!

The military value of Cossacks has been suffocated in the last twenty four years by the communist oppressor and our land drenched with the blood of Cossacks!

On September 25th, 1942, on the Don, in the neighbourhood of the city of Millerovo, under the patronage of the command of the 8th Italian Army, the 1st "sotnia" of Cossack volunteers was established and on April 1st, 1943 the sotnia gave rise to the Cossack division "Savoia".

The Cossack Division "Savoia" (later) served as headstone for the further establishment of other Cossack units!

Of this we are grateful to Italian Headquarters. This fact permitted the Cossack revival and the achievement of Russia's liberation from the communist oppressor.

An officer of the Italian Army, Giorgio Stavro Santarosa worked with zeal and energy for the organization of the Cossack division.

This name will be written down in the future history of the Russian Army!

On behalf of all the Cossacks, for the untiring work of Captain Giorgio Stavro Santarosa, the Cossack Army.

DECREES

"ITALIAN ARMY CAPTAIN GIORGIO STAVRO SANTAROSA IS NOMINATED HONORARY COSSACK OF THE KAMISCEV STANITSA, OF THE KUBAN REGION AND OF THE JEJSK SECTION".

The Chairman of the Cossack club during the meeting held O.B.

Colonel signed (Colovko)

The Secretary of the Cossack club

Captain of the Cossacks signed (Malighin)



North Caucasian officer.

sian exiles had reached the final stage of their adventure which was becoming more and more worrying. All illusions had faded away, promises had come to nothing and the nightmare of persecution by the Soviet Government which looked to them as traitors, arose once more. In a situation marked by general uncertainty, the adoption of adequate provisions was of the utmost importance.

The **Atamans**, responsible for all decisions, were now faced with the choice of one of the following course of action:

- surrender the weapons to the partisans or the allies on the Italian territory;
- withdraw together with the Germans on Austrian territory and there continue the fight to the bitter end or, as last resort, wait for the arrival of the Anglo-American forces and negotiate the surrender. The second solution was chosen and it was decided to move to Austria where the Cossack Higher Units which had been operating in the Balkans were gathering together with similar intentions.

After a briefing, orders were issued and all the personnel got ready to leave (excluding a few detachments on the plain which were cut out from the events and which later surrendered to the partisans and to the British units).

The soldiers, as usual accompanied by their relatives, were echeloned in two consistent columns designed to go along the following routes:

- Villa Santina - Ovaro - Comeglians - Ravascletto - Paluzza - Mount Croce Carnico Pass - Gail Valley;

casualties on both sides. Actions and reactions followed one another, but no episode was important enough to modify the situation.

In February a very famous person reached Carnia. Not only was he a glorious combatant of the **White Army** but the author of a book of fame (**From the Imperial Eagle to the Red Flag**) which he had written while in exile in the 30s.

It was the Great Ataman General **Piotr Nicolaevic Krasnov**, who settled in Verzegnis accompanied by a small court and always protected by a special squadron of "bodyguards".

The arrival of the eighty year old (but actually still efficient) Charismatic Chief of all Cossacks, beyond all considerations on the influences of a functional type, officially sanctioned the birth of **Kosakenland** and was celebrated by those belonging to the various communities in an atmosphere of contained optimism (lack of information on the general situation of the conflict and an unrealistic view regarding the III Reich's chances of

recovery contributed to the above state of things).

The month of April was marked by increasing acts of sabotage and more incisive actions by the partisans.

As regards that period, mention must be made of a symbolic event: the desertion of almost all the Georgian contingent which passed, with armaments and equipments, into the ranks of the Resistance. For the sake of history, it must be mentioned that this phenomenon never concerned the Cossack Units, except for some isolated cases.

THE EXODUS

That last, fatal decade of April 1945 was thus reached and, while the allied advance guard were about to enter Friuli, the time arrived for Carnia to be liberated.

Withdrawing German columns ran day and night along the main routes towards the border passes, but the **Cossack Army** remained on its positions. Obviously, the Rus-

- Tolmezzo - Arta - Paluzza - Mount Croce Carnico Pass - Gail Valley.

The first march units, together with the wagons, started moving on the evening of April 29th. The order was to reach the high valley of the Drava, in Carinthia.

The transfer, made difficult by adverse weather conditions, was marked by a last, very serious event which took place on 1st and 2nd May along the first route.

In fact, in the neighbourhood of the municipality of Ovaro (in the Degano valley) squadrons of Cossacks, after engaging in violent fights with partisan formations, let themselves go to acts of retaliation against the population. On the whole, casualties were very high. Over 60 people, between soldiers and civilians, lost their lives. Many were injured, and houses were severely damaged.

On the night of May 5th, 1945, the last convoy crossed the Mount Croce Carnico pass. This concluded the Cossacks' flight from the Carnia valleys.

CONCLUSIONS

The fate of the Cossacks, after the end of the war, has been the object of research and enquiries carried out by various people who, sometimes, have given different information according to different motivations.

Objectively speaking, it seems quite certain that:

- after having concentrated in Carinthia, the Cossacks surrendered, without opposing any resistance, to a British Brigade (probably hoping to get special conditions from the British and, maybe, be assigned, as a community, to some far away former colony);
- the British Authorities, on the basis of previous international agreements, handed them over to the Soviet Military Authorities located in Austria;

- only a small number of Cossacks managed to escape and settle in some other Nation.

This ends the survey of a war event which, though little known, is worthy of interest because of some anomalous and sometimes extraordinary aspects which do not seem to belong to our modern history but, with the due adjustments, to very distant times.

**Lieutenant General (aux)
Benedetto Rocca**

RUSSIA

Cossack of the Army of General Krasnov with functions of Auxiliary Police "Schutzmann" in the anti-partisan warfare - Carnia 1944-45.

Uniform: it is the dark grey one of the SS Waffen with astrakhan "papaca", SS collar badges and the national emblem on the left sleeve.

Equipment: traditionally speaking, Cossacks did not use spurs, but a whip or "nagaika".

Accessories for the horse: typical Cossack saddle (with wooden structure and leather cushion) which kept the horsemen in a characteristic position high on the horse.

Weapons: British made rifle Sten Mark II 9mm used by Italian partisans, but captured and used also by the safety forces of the Axis.





NOTES

(1) The 15th Cossack Cavalry Corps was part of the contingent together with an undefined number of self-sufficient Units. The former was under the command of the German General **Helmut von Pannwitz**, famous for having re-organized the Cossack Units in Germany. Elements of the above contingent operated, from time to time, in the provinces of Trieste and Gorizia.

(2) According to reliable information, the initial organization of the Cossack Division was as follows:

- General Staff
- a security Unit called **Sentry Unit**;
- 1st and 2nd Don regiments;
- 3rd Kuban regiment;
- 4th Terek regiment.

The following must be added to the above Units:

- 8th and 10th light Cavalry regiments (which came in a second stage).

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GERMANY

Division of the Cossacks of the Don - Non commissioned Officer, 1944.

During the 2nd World War many were on service as volunteers in the army. While other volunteers were generally satisfied to wear a shield with the national colours on the sleeve of the normal uniform of the armed forces, the Cossacks wanted to preserve their own characteristic features. Together with the German field shirt, they wore the characteristic fur cap ("papaca") and dark blue trousers with normal bands. The cockade on the cap was of the same colours as the badge on the sleeve and the band on the cap, the same colour as the trouser bands.

Siberian Cossacks wore badges like the Caucasian ones on Cossack uniforms.

ADOLFO MENZEL

A NINETEENTH CENTURY GERMAN PAINTER



Adolph Friedrich Erdmann Menzel was born at Breslaw on 8 December 1815. In 1830, that is, at the age of 15, he moved with his family to Berlin, where his father opened a lithographic workshop.

In Berlin the young man entered the Fine Arts Academy, but in 1832 he took over the management of his father's workshop.

The beginning of his career was somewhat difficult and marked with disappointments and sacrifices. Very quickly, however, he succeeded in establishing a reputation for himself as a quality lithographer, above all as one with a special innovative style.

Practically self taught, very short and certainly not robust, with a small round beard framing his face and two small but sparkling eyes, Menzel displayed a singular determination and tenaciousness in his will to succeed which seemed out of character with his misanthropic nature and his life as an inveterate bachelor.

This luck really changed in 1840 when he was commissioned to produce a series of plates illustrating Franz Kugler's (1808-1858) *Geschichte Friedrichs des Grossen* (History of Frederick the Great).

This book was published in 1842 and contained 200 illustrations by Menzel which were very well received.

Having thus established himself, he went on and perfected his skill as a lithographer, ultimately becoming not just an expert but indeed a master craftsman.

The period 1845-1851 marks what can be considered his best work in the field of uniforms and was the one which gained him the greatest satisfaction from all points of view.

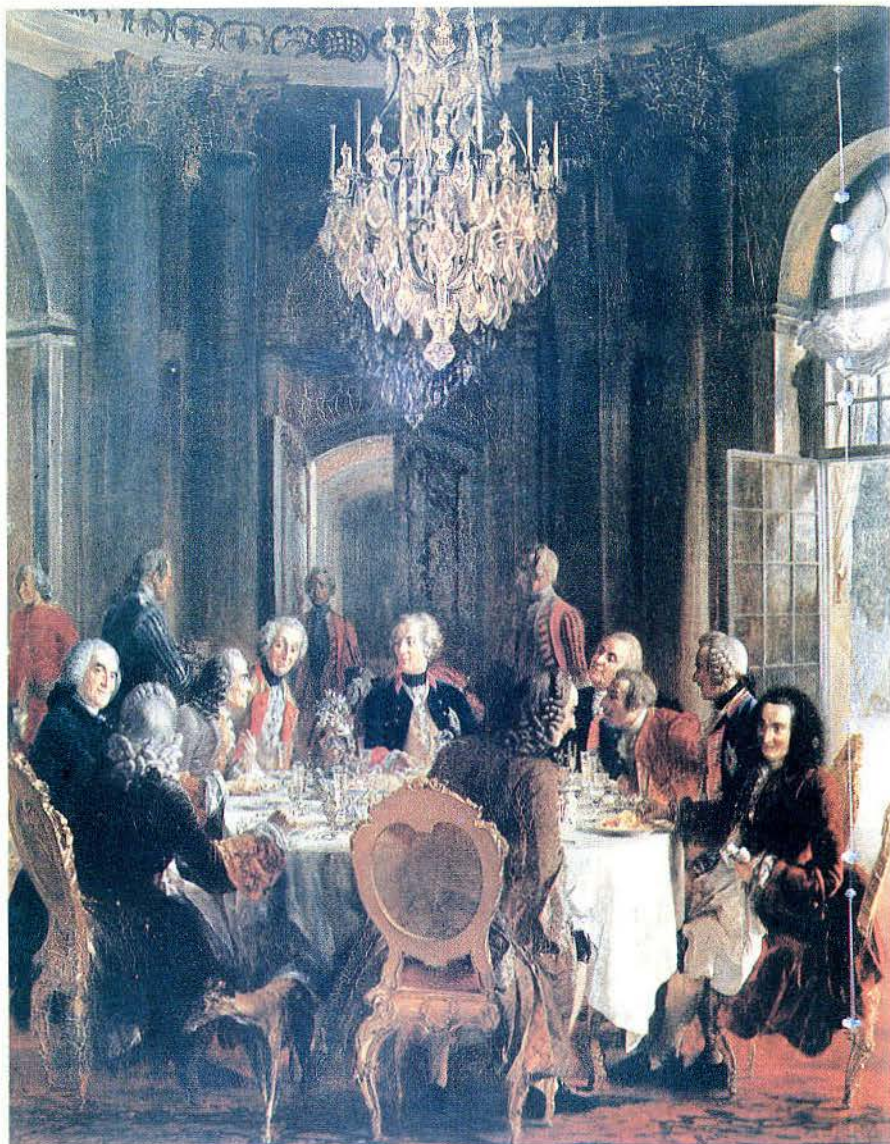
His was the *Die Armee Friedrichs Des Grossen in ihrer Uniformierung*

gezeichnet und erläutert von Adolph Menzel (The Army of Frederick the Great in its uniforms drawn and illustrated by Adolph Menzel) which is still widely known today not only by scholars but by booklovers in general. The book, published in Berlin, bears no date, but it is almost certainly 1851.

Only 30 copies were printed of the first edition. In his plates Menzel succeeded not only in presenting all the Regiments of the King of Prussia and the related Services with the maximum fidelity, without any alteration or invention, but also depicting typical military figures of the time in an extremely attractive way.

The book is composed of 436 plates, almost all of which, in addition to the central figure, are accompanied by drawings of details referring to the various types of head-dress or accessories of the uniform depicted (1).

In the same year, 1851, Menzel made the xylographs for Karl Friedrich Lange's book *«Die alte Preussischen Armee»* (The Old Prussian Army).



Perhaps because of the peculiar form of illustration with which his success had begun, but also because he was a typical German, he had a great admiration for Frederick the Great. So in 1851 he produced eight large plates dedicated to the life of this king. Included among them was *«Friedrichs Ansprache an seine Generäle von der Schlag bei Leuthen (1757)»* (Speech by Frederick the Great to his generals before the battle of Leuthen). This was the speech in which the king pronounced the well-known phrase "We either defeat the enemy, or we shall be buried by his batteries!". Another was *«Friedrich der Grosse empfängt Joseph II in Neisse»* (1769) (Frederick the Great receives Joseph II at Neisse).

Above.

A. Menzel: *«Dinner after the ball»*, 1870

Left.

Kurssel Fusilier of Frederic the Great's Army

Even more famous, however, are the plates entitled *«Flötenkonzert in Sanssouci»* (Flute concert at Sans Souci) and *«Die Tafelrunde von Sans Souci»* (The round table at Sans Souci). The first of these shows Frederick the Great, who was a flute maestro, playing this instrument to the accompaniment of an orchestra in a room of the famous villa built by him at Potsdam. In the second the king is depicted at table with several important persons, including the famous French philosopher *François Marie Arouet de*

Voltaire, a much welcomed guest of his who is portrayed in Menzel's plate in a way that is both a good likeness and extremely vivacious.

Menzel himself, in a previous wood carving, had depicted Frederick Wilhelm's "smokers' room". Because of the obviously uncontrolled and coarse gaiety of the various subjects, this plate is in complete contrast with the calm and restful atmosphere of the "round table" of his son.

Menzel was also called the "Painter of the Hohenzollern", as he had portrayed scenes from the life of Wilhelm I and his court, including "Coronation of Wilhelm at Königsberg in 1861", "Departure of King Wilhelm for the Army on 31 July 1870", "Supper after the dance" (1870) and "In the White Room" (1888).

He travelled to Paris in 1855, 1867 and 1868, where he met several French artists, in particular, the painter **Gustave Courbet**, the leader of the "realist" school. These contacts were responsible for several different kinds of works, including the 1875 "Rolling mill". This work caused quite a sensation at the time. In it the author endeavours to extol the beauty and fascination of the industrial world which was being born at the time.

Menzel became a member of the Berlin Academy in 1853, of those of Vienna, Munich, Dresden and Bruxelles in 1857, and in 1875 he was elected to the Senate of the



Academy of Fine Arts of Berlin. He was awarded medals at the following exhibitions: Berlin, 1857, Munich, 1879, Vienna, 1883 and 1888, Chicago in 1893 and Antwerp in 1894.

He died in Berlin on 9 February 1905.

About forty of his paintings and several thousands of his drawings are on display at the National Gallery of Berlin. The almost complete collection of his engravings is contained in the Print Cabinet of the same museum.

Other works of his are to be found in the Museums of Stuttgart, Moscow and Weimar.

Some idea of the value of his works is shown by the fact that, in an auction held in Paris at the Kurtz Heim in 1898, his painting "Frederick the Great and the 'Bar-



barina" (2) was sold for the sum of Frs 18,875.

Alessandro Gasparinetti

NOTES

(1) A second edition of the book was published in early 1900 by the publisher Martin Oldembourg of Berlin "by order of His Imperial Majesty" and was edited by Prof. F. Skarbina and the Captain of State Major Jani.

Another, smaller-sized edition containing a reduced number of plates was published around 1980?? by the Schuler Verlag of Stuttgart.

(2) The "Barbarina" was in fact the beautiful singer *Barbara Campanini* of Parma who, in 1744 was in Venice. As she had refused to sing in Berlin even though she had signed a contract, Frederick had her escorted to Berlin where she was obliged to perform and obtained a triumph on the stage. It appears that the king was not insensitive to her charms and it is a fact that he accorded her a stipend amounting to three times what he gave one of his ministers.



Above left
Stechow Dragoon Regiment

Above right.
Infantry Regiment von Kleist

Left.
Plettenberg Dragoon Regiment

To the side.
Portrait of Frederic the Great of Prussia

MILITARY ARTISTS AND ARTIST MILITARY MEN



16th ART EXHIBITION
OF THE ANTI-AIRCRAFT ARTILLERY OF THE ARMY ON THE
25th ANNIVERSARY OF ITS ESTABLISHMENT

...the exhibition may be proud of having gathered such important names and as far as criticism and artistic value are concerned, it certainly overcomes the limits of any municipal exhibition and reaches the superior levels at which both rank and uniform disappear and we all feel close to one another, like true men.

Camillo Semenzano

The suggestion to set up an art exhibition with works by discharged military men and men on active service of the antiaircraft Artillery of the Army, was at first met with some puzzlement. Not because of a preconceived distrust of the Armed Forces, but because of an understandable and, in some way justified, surprise at such an unusual, though stimulating, request. In fact, as regards figurative arts and art criticism, not enough attention is

paid to the links which have always existed between the world of art and a particular, atypical environment such as the military one.

Yet, love of culture and an interest in figurative arts are no novelty for the military institution which has always given the world of art suggestions, characters and subjects of great significance as regards aesthetics both in ancient art and in the intermediate and modern period. National artistic tradition is full of examples from Mantegna to Paolo Uccello, from Michelangelo to Leonardo (who engaged with admirable inventive power in conceiving war machines and instruments), to the Macchiaioli of later times, almost all taking part in the vicissitudes of the Risorgimento, evoked so nobly by the art of Fattori. We must also remember the varied and suggestive sketches on

military life by Quinto Cenni to which the "Military Journal" dedicated articles and whole books when presenting its "Code" which is a work of historic and documentary research depicting uniforms in detail as if they were fragments of a mosaic allowing the reconstruction of the military world as a whole and in its minute particulars.

The bonds between artists and the military world were further strengthened during the First World War. In fact, from 1915 to 1918 a great number of artists met and got to know each other during the military service: Savinio, Soffici, Morandi, De Pisis and the two enlisted youths De Chirico and Carrà who, in Ferrara, left a basic mark on the metaphysic issue.

The futurist movement deserves a different and more detailed analysis and this because of its ideological aspects too. This movement involved almost all its followers in the vicissitudes of war, starting from second-lieutenant Filippo Tommaso Marinetti and Sant'Elia to gunner Umberto Boccioni who died during training at the age of 33, after kindly refusing to work in an office to live and work... in a battery.

In the early post-war period and in the twenty years of Fascism, col-

Left
Giovanfrancesco Gonzaga
"Memories of a parade", 60 x 80 (private collection)

Below
Giovanfrancesco Gonzaga
"Lancers on the coast", 110 x 55, oil on canvas





Domenico Esposito
«That day the fishermen», 70 × 50, oil on canvas, 1984

onial conquests and the vicissitudes of war were depicted by the illustrations of Beltrame, Pisani and others; thus, in the Spring of 1942, at the height of the conflict, the Propaganda Office of Army General Staff organised a "First Exhibition of Italian Artists at arms" setting it up in the Palazzo delle Esposizioni in Rome.

About a quarter of a century later, in 1965, again in Rome in the rooms of the officers' club of the Armed Forces, an exhibition of figurative art was held. It was entitled "The Italian soldier" and was both contemporary and retrospective. Since then, art exhibitions started flourishing all over the Army units. They were rather modest and mainly designed for a better use of the enlisted soldier's free time, thus anticipating by many years the "Rules and Principles concerning Military Discipline" (law 382/79) in which it is stated that "the State promotes the cultural growth..." of soldiers.

It is for the above reasons that the

art Exhibition of the antiaircraft Artillery of the Army was established. Long-lasting (sixteen editions), of high quality and with a great number of exhibitors, it proves that the Armed Forces, deep set in the spirit of modern society, are aware that military service must be a formative gymnasium also as regards culture.

The Exhibition, started in 1972, takes place once a year and gathers in sections covering the entire sector of the figurative arts (painting, drawings and graphic, sculpture and

It is desirable that all those who have a deep interest in the arts will, in the future, pay lasting attention to many of the artists taking part in the exhibition.

The exhibition is marked by quality and prestige. It is an acknowledgement to the commitment of all those involved.

Carlo Munari

artistic craftsmanship, photography), works by soldiers of all order and rank on active service in the antiaircraft speciality.

The first editions had a rather modest start: low participation, scarce artistic claims and meetings organised in the barracks with paintings exhibited in the corridors, parlours and gymnasiums. Then, as the initiative became more and more interesting, as its value increased and the staff started paying it more attention, someone was hit by the idea of involving civilian society.

Thus, in 1981, at its tenth edition, the exhibition was set up in the beautiful Villa Simes-Contarini in Piazzola sul Brenta and was considered very successful by critics and public alike: the following year it

Giovanfrancesco Gonzaga
The Savoia escort, (Russian Campaign)
The legendary unit in which the painter's
lower limbs began to freeze, 110 x 110, oil
on canvas.

took place in Mantua, at Palazzo Te; in 1983 in Ferrara, in the Castle of the Ducal family of Este, with symbolic recollections of two soldiers — extraordinary artists who had spent there their most beautiful artistic season: Giorgio De Chirico and Carlo Carrà; in 1984 the show again took place at Villa Contarini; the following year the exhibition was held at the Loggetta Lombardesca in Ravenna and in 1986 again in Ferrara in the church of San Romano.

Its presence this year at the Museo Civico of the Eremitani, in an almost physical contact with Giotto and Mantegna, was for the antiaircraft Artillery on the 25th anniversary of its establishment, a point of arrival and a legitimate reason of pride.

The 16th edition gathered together military artists on active service and the winners of past editions as well as those belonging to the branch in the 50s and 60s; among the latter Valverde, Schifano, Sartori and Zanellati deserve special mention. Among the winners of the previous editions mention must be made of the sculptors Vanni, Aloisi and Cavina; the painters Lazzari, Mazza, Ochs, Verani, Cappelli and Buso; the graphics Baldacci and Guidetti.

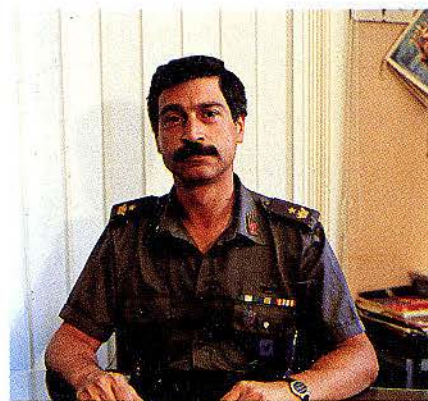
A "gift" by Giorgio Segato was dedicated to the sponsor of the exhibition, Gianfrancesco Gonzaga, in acknowledgement of his heroic past as a soldier during the Russian campaign and of his fondness for military subjects.

As in the past editions, the artistic Committee was formed by famous names such as the already mentioned Giorgio Segato, Carlo Munari for paintings, Silvana Weiller Romain Jacur for drawings and graphic, Fulvio Roiter for photography. The name given to the Exhibition "Military Artists and Artist Military



Men" and participants with and without a rank in turns, formed a fortunate union among those who still live and work within antiaircraft Artillery and those who worked there in recent or remote years. The possibility of exchanging the terms "artist" and "military" which are not at all antithetic was underlined together with an artistic and human synthesis among soldiers and former soldiers, united in a formerly unheard of esprit de corps.

Ferdinando Schettino



...The great interest in the improvement of the quality of life linked to the huge development of the arts affects the life of soldiers too where there already existed a strong tradition due to music.

Giorgio Segato
 (Il Mattino, December 3rd, 1981)

Cavalry Major, Ferdinando Schettino, attended the courses at the Military Academy and the Branch School as well as the 108th General Staff course at the Higher War Institute. He commanded the platoon, the reconnaissance squadron and the tank squadron of the 19th Cavalleggeri Guide Squadron Group; the tank company at the Armoured Troop School of Caserta. He occupied the posts of UAMEC and OA officer. He took part in the rescue operations during the earthquakes in Friuli and Irpinia.

At present he is Assistant manager of the Rivista Militare (Military Journal).

ENGLISH ITALIAN

GLOSSARY

B

back, s.
background, s.
b. radiation
to back, v.t.i.

to back up
badge, s.

to baffle, v.t.

to b. the enemy
bag, s.
sand b.

sleeping b.

baggage, s.
bail, s.
to bail, v.t.i.

to bail out
balacava helmet
balance, s.
b. of power
b. of terror
to balance, v.t.i.

balanced, ag.
b. collective forces
ball, s.
b. cartridge

retroguardia
sfondo
radioattività naturale
rinforzare, sostenere,
spalleggiare
salire d'appoggio (alpinismo)
gallone, distintivo, fregio,
insegna
ingannare, confondere,
sconcertare
confondere il nemico
borsa, sacca, sacchetto
sacchetto di terra (per
zavorra o usato come
arma)
sacco a pelo, sacco da
bivacco
salmeria, bagaglio
bastione, palizzata
alzare le mani in segno di
resa
lanciarsi col paracadute
passamontagna
equilibrio
equilibrio di forze
equilibrio del terrore
bilanciare, mantenere
l'equilibrio
equilibrato
forza equilibrata
palla, sfera, proiettile
cartuccia a pallottole

ball-proof
cannon **b.**
fire **b.**
ballast, s.
to ballast, v.t.
ballista, s. pl. ballistae
ballistic, ag.
b. correction of the moment

b. density
b. measurement equipment

b. missile defence centre

b. missile defence
emergency action report

b. missile defence
missile battalion
b. missile defence
operations
b. missile defence system

b. missile launcher
b. winds
b. missile
b. trajectory
ballistics, s.
balloon, s.
pilot **b.**
sounding **b.**
balloonist, s.

a prova di proiettile
palla di cannone
sfera di fuoco
zavorra
zavorrare
balista
balistica, di balistica
correzione balistica sul
momento
densità balistica
equipaggiamento per la
misurazione balistica
centro di difesa contro i
missili balistici
rapporto sulle misure di
emergenza per la difesa
da missili balistici
battaglione missili per la
difesa da missili balistici
operazioni per la difesa
da missili balistici
sistema di difesa da
missili balistici
lancia missili balistici
venti balistici
missile balistico
traiettoria balistica
balistica
aerostato
pallone pilota
pallone sonda
aeronauta

band, s.

brass **b.**
frequency **b.**
rotating **b.**

single side **b.**
bandage, s.
bandoleer, s.
bandolier, s.
bandsman, s.
to banish, v.t.
the enemy was banished from the territory

banishment, s.

bank, s.

b. of a river
b. of clouds
b. of fog
b. of ice
banner, s.

bannered, ag.

bannerman, s.

bar, s. (arald.)

barbarian, ag.

barbaric, ag.

barbarically, av.

barbarism, s.

barbed, ag.

b. wire

b. wire fence

b. wire net

barbican, s. (arch., mil.)

to bard, v.t.

barded, ag.

to bare, v.t.

to b. the sabre

barehanded, ag.

barge, s.

unloading **b.**

barrack, s. gener. pl.

b. master-at-arms

to barrack, v.t.i.

barrage, s.

b. balloon

b. fire

b. plan

anti-aircraft b.

artillery b.

creeping b.

linear b.

mortar b.

supersonic b.

barrel, s.

spare b.

barrelled, ag.

single b. gun

double b. gun

barricade, s.

barrier, s.

banda (musica), banda
(radio), banda (gruppo)
fanfara
banda di frequenza
corona di forzamento (di
proiettile)
banda laterale unica
benda, fascia
bandoliera
bandoliera
bandista
esiliare, cacciare

il nemico fu cacciato dal
territorio

esilio

argine, sponda, banco

argine di un fiume

banco di nuvole

banco di nebbia

banco di ghiaccio

vessillo, stendardo,

bandiera

imbandierato

portabandiera

sbarra, banda (su scudo)

barbaro, straniero,

selvaggio

barbarico

barbaramente

barbarie

dentato, uncinato, spinato

filo spinato

siepe di filo spinato

rete di filo spinato

barbacane

bardare

bardato (di cavallo)

sfoderare, sguainare

sguainare la sciabola

a mano nuda, senz'armi

chiatta, scialuppa, lancia

di parata

chiatta da sbarco

caserma

commissario di caserma

accasermare

sbarramento

pallone di sbarramento

tiro, fuoco di sbarramento

piano di sbarramento

sbarramento antiaereo

sbarramento di artiglieria

cortina mobile

cortina a percussione

sbarramento di mortai

sbarramento ultrasonico

canna, tamburo (di arma)

canna di ricambio

provvisto di canna (armi)

fucile a una canna

fucile a due canne

barricata, barriera

ostacolo, barriera

b. plan

to barrier, v.t.

bascule bridge, s.

base, s.

b. line

advanced b.

air b.

b. command

b. development

b. area commandant

b. ammunition depot

b. development plan

land b.

logistic b.

b. map

b. map symbol

naval b.

b. quartermaster

b. remount depot

b. symbol

baseline performance

criteria

basic, ag.

b. allowance for quarters

b. allowance for sub-

sistence

b. air speed

b. air temperature

b. daily food allowance

b. intelligence

b. load

b. planning

b. training

b. undertakings

bastille, s.

bastion, s.

bath, s.

field b.

mobile b.

batman, s.

battalion, s.

airborne b.

anti tank b.

artillery b.

b. beachhead

b. ground surveillance
section

b. group

infantry b.

logistic support b.

piano degli ostacoli
chiudere con una barriera
ponte levatoio

base

base di approvvigionamento

base avanzata

base aerea

comando delle basi

gestione di una base

comandante di zona della

base

deposito munizioni della

base

piano di sviluppo della

base

base terrestre

base logistica

carta di base

simbolo di carta di base

base navale

commissario della base

deposito rifornimento

cavalli della base

simbolo di base

criteri esecutivi di base

basico, di base, fon-
damentale

indennità di base per
l'alloggio

indennità di base per la
sussistenza

velocità di volo di base

temperatura base del-
l'aria

razione viveri di base gior-
naliera

documentazione di base

dotazione di prima linea

programmazione di base

addestramento di base

azione fondamentale

fortezza, prigione

bastione

bagno

bagno campale

bagno campale mobile

ordinanza, attendente

(generalmente di ufficiale
di cavalleria)

battaglione

battaglione

aviotrasportato

battaglione controcarri

gruppo di artiglieria

testa di sbarco di bat-

taglione

settore di battaglione per
la sorveglianza del

terreno

gruppo tattico a livello

battaglione

battaglione di fanteria

battaglione logistico

b. orderly corporal	caporale di giornata del battaglione	b. identification system study	studio di un sistema per l'identificazione del campo di battaglia
b. orderly sergeant	sergente di giornata di battaglione	b. surveillance	sorveglianza del campo di battaglia
b. operations centre	centro operativo di battaglione	b. fleet	flotta da battaglia
rifle b.	battaglione fucilieri	b. plane	aereo da combattimento
tank b.	battaglione carri	b. position	posizione di resistenza
to batter , v.t.i. (artilg.)	battere, battere in breccia, atterrare	air b.	combattimento aereo
battering , s.	il cannoneggiare, il battere in breccia	counteroffensive b.	battaglia controffensiva
b. charge	carica completa da cannone	decisive b.	battaglia decisiva
b. piece	cannone di grosso calibro	defensive b.	battaglia difensiva
battery , s. (artilg.)	batteria, accumulatore, pila	land/air b.	battaglia aereoterrestre
b. aiming point	punto di mira di batteria	offensive b.	battaglia offensiva
b. acquisition radar	radar per l'acquisizione di batteria	order of b.	ordine di battaglia
b. control area	zona di controllo della batteria	pitched b.	battaglia campale
b. control central	centrale di controllo del tiro di batteria	sham b.	finta battaglia
b. control officer	ufficiale di controllo della batteria	to battle , v.t.i.	combattere, battersi, battere
b. command post	posto di comando della batteria	battlement , s.	merlo, bastione
b. display unit	unità di spiegamento della batteria	battleship , s.	corazzata, nave da guerra
b. quartermaster sergeant	sergente di fureria della batteria	battleworthiness , s.	idoneità a continuare la battaglia
antiaircraft b.	batteria contraerea	bay , s.	alloro
artillery b.	batteria di artiglieria	to carry off the bays	riportare la vittoria, l'alloro
coast b.	batteria costiera	bayonet , s.	baionetta
dry b.	pila a secco	b. scabbard	fodero per baionetta
field artillery b.	batteria di artiglieria da campagna	b. thrust sword b.	baionettata
horse b.	batteria a cavallo	to fix b.	sciabola
trench mortar b.	batteria da mortaio	to unfix b.	innestare la baionetta
battle , s.	battaglia, combattimento	bayonets , s. pl.	levare la baionetta
b. area surveillance and integrated communications	sorveglianza della zona di battaglia e comunicazioni integrate	to bayonet , v.t.	soldati armati di baionette
b. casualties	perdite umane in combattimento	beach , s.	colpire con la baionetta
b. cruiser	incrociatore da battaglia	beach group	spiaggia
b. damage assessment	asestamento dei danni da combattimento	b. master	gruppo di spiaggia
b. dress	uniforme da campo	b. minefield	ufficiale che sorveglia lo sbarco di truppe
b. efficiency prize	premio per l'efficienza in battaglia	b. reserves	campo di mine antisbarco
b. practice target	bersaglio di esercitazione per la battaglia	b. width	riserve di spiaggia
b. reconnaissance	ricognizione della battaglia	landing b.	ampiezza di spiaggia
battlefield	campo di battaglia	beachhead , s.	spiaggia di sbarco
b. estimate	valutazione del campo di battaglia	beaching , s.	testa di sbarco
b. field illumination	illuminazione del campo di battaglia	hasty b.	sbarco marittimo
b. information centre	centro informazioni sul campo di battaglia	bead , s.	sbarco rapido
		to beam , v.t.i.	mirino (di fucile)
		to beam a message	individuare a mezzo radar
		bearer , s.	trasmettere un messaggio per onde comandate
		ammunition b.	portatore
		litter b.	portamunizioni
		litter b. team	portaferiti
		standard b.	nucleo portaferiti
		bearing , s.	porta stendardo
		compass b.	rilevamento, (arald.) arme
		grid b.	rilevamento con bussola
		magnetic b.	rilevamento cartografico
		the bearing on the coat of arms	rilevamento magnetico
		beaver , s.	arme sullo stemma
		bed , s.	parte inferiore della visiera di un elmo
			letto

camp **b.**
field **b.**
folding **b.**
river **b.**
before, prep.
b. flight inspection
belated, ag.
the enemy was **b.**

to belay, v.t.

belch, s.

bellicose, ag.
bellicosity, s.
belligerency, s.
belligerent, ag. s.
belt, s.
carrier **b.**
life **b.**
metallic link **b.**

mine **b.**
mobile defence **b.**
bench, s.
testing **b.**
bend, s. (arald.)
bengal light, s.
bengalore torpedo, s.
to beset, v.t.
to b. the enemy
besetment, s.
to besiege, v.t.

besieger, s.
to betray, v.t.
betrayal, s.
betrayed, s.
bilateral, ag.
b. infrastructure
bill, s.

b. of health
billet, s.

billeting, s.
b. accommodation
to billet, v.t.
to b. troops
binding, s.
binoculars, s. pl.
biological, ag.
b. agent
b. ammunition
b. defence
b. operation
b. warfare
b. weapon
to bite, v.t.i.
bitter end, s.
to fight to the bitter end
bivouac, s.
to bivouac, v.i.

branda
letto da campo
branda
letto di un fiume
prima, avanti
preparazione al volo
sorpreso dall'oscurità
il nemico fu sorpreso
dall'oscurità
(alpinismo) assicurare
una corda
scoppio (di fiamme,
cannone)
bellicoso, guerresco
bellicosità
belligeranza
belligerante
cinturone, fascia, nastro
nastro trasportatore
salvagente
nastro per munizioni (per
mitragliatrice)
fascia minata
fascia di logoramento
banco
banco di prova
banda
bengala
bengalore
circondare, assediare
assediare il nemico
assedio, aggiramento
assediare, accerchiare,
assalire
assediante
tradire
tradimento
traditore
bilaterale
infrastruttura bilaterale
progetto di legge, biglietto
di banca, certificato
certificato sanitario
alloggio, accantonamento
di militari in case
private, buono d'alloggio
alloggiamento
sistemazione in alloggio
alloggiare (soldati)
alloggiare le truppe
attacco da sci
binocolo
biologico, batteriologico
aggressivo batteriologico
munizione batteriologica
difesa batteriologica
operazione biologica
guerra batteriologica
arma batteriologica
ferire (di spada)
oltranza
combattere a oltranza
bivacco
bivaccare

blackout, s.

to blackout, v.t.i.

blade, s.

folded **b.**

unfolded **b.**

blank, ag.

b. cartridge

blast, s.

air **b.**

atomic **b.**

b. hole

to blast, v.t.

blaze, s.

the town was in a blaze

blazon, s. (arald.)

blazonry, s.

blind, ag.

b. approach landing
system

b. bombing zone

b. fire direction

b. flight

b. shell

b. side

to blind, v.t.i.

blindage, s.

blinker, s.

blister, s.

b. agent

blitz, s.

to blitz, v.t.

blitzkrieg, s.

bloated, ag.

b. armaments

bloc, s.

the Western **b.**

block, s.

b. house

b. point

road **b.**

blockade, s.

to raise the b.

to run the b.

to blockade, v.t.

blockhouse, s.

blocking, s. ag.

b. action

b. echelon

oscuramento, schermatura
oscurare, schermare
lama, spada, pala di
elicottero
pala ripiegata
pala non ripiegata
in bianco, vuoto
cartuccia a salve
raffica, colpo, scoppio,
esplosione
scoppio aereo
esplosione atomica
fornello di mina
fare esplodere, far saltare
(con esplosivi)
fiamma, fiammata,
vampata
la città era in fiamme
blasone, stemma
araldica
cieco
sistema di atterraggio per
volo cieco
zona di bombardamento
senza restrizioni
direzione del fuoco cieca
volo cieco
granata inesplosa
lato non protetto
accecare, abbagliare,
blindare, corazzare
blindaggio
lampeggiatore
vescica
aggressivo vescicante
attacco improvviso,
guerra lampo
distruggere
(specialmente con attacco
aereo)
guerra lampo
sovrabbondante
armamenti eccessivi
blocco (di partiti, nazioni)
il blocco Occidentale,
l'Occidente unito
blocco, fabbricato,
isolato
casamatta, fortino in
calcestruzzo
posto di blocco
blocco stradale, posto di
sbarramento
posto di sbarramento,
blocco, assedio
togliere il blocco
forzare il blocco
bloccare, assediare
fortino, casamatta
arresto
azione di resistenza e
arresto
scaglione di arresto

b. position	posizione di arresto	b. store officer	ufficiale addetto all'im-
b. line	linea di arresto	b. testing device	magazzinaggio di bombe
b. zone	zona di arresto		dispositivo per il collaudo
temporary b.	arresto temporaneo		delle bombe
to block-up, v.t.	fermare, arrestare,	b. thrower	lanciabombe
	sbarrare	armour piercing b.	bomba perforante
to block-up the enemy	arrestare l'avanzata del	atom, atomic b.	bomba atomica
advance	nemico	azon b.	bomba radioguidata
blood, s.	sangue	fragmentation b.	bomba dirompente
b. agent	tossico del sangue	C. b.	bomba al cobalto
b. bank	banca del sangue	fire b.	bomba incendiaria
b. supply unit	unità per l'approvigiona-	H b.	bomba all'idrogeno
	mento di sangue	remote control b.	bomba controllata a
b. transfusion service	servizio trasfusioni		distanza
bloodletting, s.	spargimento di sangue	smoke b.	bomba nebbiogenica
bloodshed, s.	massacro, spargimento di	submarine b.	bomba sottomarina
	sangue	time b.	bomba ad orologeria
bloody, ag.	cruento, sanguinoso	unexploded b.	bomba inesplosa
b. fight	conflitto sanguinoso	to bomb, v.t.	bombardare
blot, s.	punto debole in strategia	to b. out	costringere ad abban-
blue, ag.	blu		donare casa con bombar-
b. forces	forze azzurre	to b. up	damento aereo
b. commander	comandante delle forze	to bombard, v.t.	fare il carico di bombe
	azzurre	bombardment, s.	bombardare
to blow up, v.t.i.	far saltare per aria	air b.	bombardamento
board, s.	bordo, mensa, consiglio,	dive b.	bombardamento aereo
	comitato, organo		bombardamento aereo in
b. and lodging	vitto e alloggio	high altitude b.	picchiata
air transport allocation			bombardamento ad alta
b.		level b.	quota
on b.	organo per l'assegna-	low altitude b.	bombardamento aereo in
selection b.	zione del trasporto aereo		quota
boat, s.	a bordo (aereo, nave)	naval b.	bombardamento a bassa
b. lane	gruppo selettori	pattern b.	quota
b. assault	battello	bomber, s.	bombardamento navale
vedette b.	corridoio di sbarco	all weather strategic b.	bombardamento a tappeto
bob, s.	battello d'assalto		bombardiere
light b.	nave vedetta	attack b.	aereo da bombardamento
	soldato di fanteria	fighter b.	strategico
body, s.	soldato di fanteria	jet b.	bombardiere da attacco
	leggera	jet boosted b.	cacciabombardiere
main b.	corpo, parte sostanziale	heavy b.	bombardiere a reazione
	di qualcosa, ente		bombardiere a reazione
public b.	grosso (di una for-	light b.	aereo da bombardamento
bodyguard, s.	mazione)	medium b.	pesante
bolt, s.	ente pubblico	night fighter b.	aereo da bombardamento
	guardia del corpo	piston engined b.	leggero
bomb, s.	otturatore (di armi da	strategic b.	aereo da bombardamento
b. aimer	fuoco)	tactical b.	medio
b. assembly spares	bomba	twin engined b.	aereo da bombardamento
b. carrier	puntatore di bombe	universal b.	per attacchi notturni
b. damage repair kit	parti di ricambio per bombe	variable sweep b.	aereo a pistone
	aereo da bombardamento	b. defence missile	aereo da bombardamento
b. damage survey	corredo per riparare i dan-	torpedo b.	strategico
	ni delle bombe		aereo da bombardamento
b. disposal squad	sopralluogo dei danni da		tattico
b. disposal unit	bombe		aereo da bombardamento
b. hole	squadra lancia bombe		a due motori
b. proof	unità lancia bombe		aereo da bombardamento
b. release point	cratere		universale
b. sight	a prova di bomba		aereo da bombardamento
	punto di lancio di bombe		a raggio variabile
	dispositivo di pun-		missile anti bombardiere
	tamento		aerosilurante

bombing, s.
b. aviation

b. plane
b. report

dive **b.**

bombshell, s.
bonfire, s.
bonus, s.
 long service **b.**
booby, s.

b. trap
book, s.
 order **b.**

sick **b.**
 signals **b.**
b. keeping
booster, s.
boot, s.
 isothermal **b.**
 mountain **b.**
 riding **b.**
 ski **b.**
border, s.

b. guard
b. land
b. line
b. patrol
borderer, s.
bordure, s. (arald.)
bore, s.
 rifled **b.**
 smooth **b.**
bound, s. gener. pl.
 out of **bounds**
 within **bounds**
boundary, s.

b. line
 unit **b.**
bounty, s.
bourrelet, s.

bow, s.
box, s.
 packing **b.**
 sentry **b.**
bracket, s. (artigl.)
 to **bracket**, v.t.i.
braid, s.
 to **braid**, v.t.
branch, s.

brass, ag.
b. band
b. hat (sl.)
brave, ag.

bravery, s.

bombardamento
 aviazione da bombardamento
 aereo da bombardamento
 situazione bombardamento
 bombardamento in picchiata
 granata
 falò
 premio, gratifica
 premio di anzianità
 ordigno esplosivo dall'apparenza innocua
 trappola
 libro
 registro degli ordini impartiti
 registro degli ammalati
 codice dei segnali
 contabilità
 detonatore
 stivale, calzatura, scarpa
 scarpone isotermico
 scarpone da montagna
 stivale da cavallo
 scarpone da sci
 confine, frontiera, demarcazione
 guardia di confine
 zona di confine
 linea di demarcazione
 pattuglia di confine
 abitante di confine
 bordura
 anima (di canna), calibro
 anima rigata (di arma)
 anima liscia (di arma)
 confine, limite
 fuori dai limiti
 entro i limiti
 limite, frontiera, termine, confine
 frontiera
 limite di settore
 premio di arruolamento
 fascia di centramento (proiettile)
 prua di nave
 scatola, cassa
 cassetta per munizioni
 garitta per sentinella
 forcella di cannone
 fare forcella
 gallone
 guarnire (di gallone)
 branca, (arma e servizio dell'Esercito)
 di ottone
 fanfara
 ufficiale superiore
 prode, audace, coraggioso
 coraggio, audacia, valore

breach, s.

b. of discipline
b. of duty
b. of the peace

to séal a **b.**
 to **breach**, v.t.i.
 to **b.** the defences

to **break**, v.t.i.
 to **b.** ranks
 to **b.** the step
 to **b. out**, v.t.i.
 to **b. out** from encirclement
war broke out

breakdown, s.

the **b.** of negotiations
breaking, s.
b. of contact
b. of engagement

b. of pursuit

breakthrough, s.

breastplate, s.

breech, s.
b. block
b. loader
b. well
brevet, s.

to **brevet**, v.t.

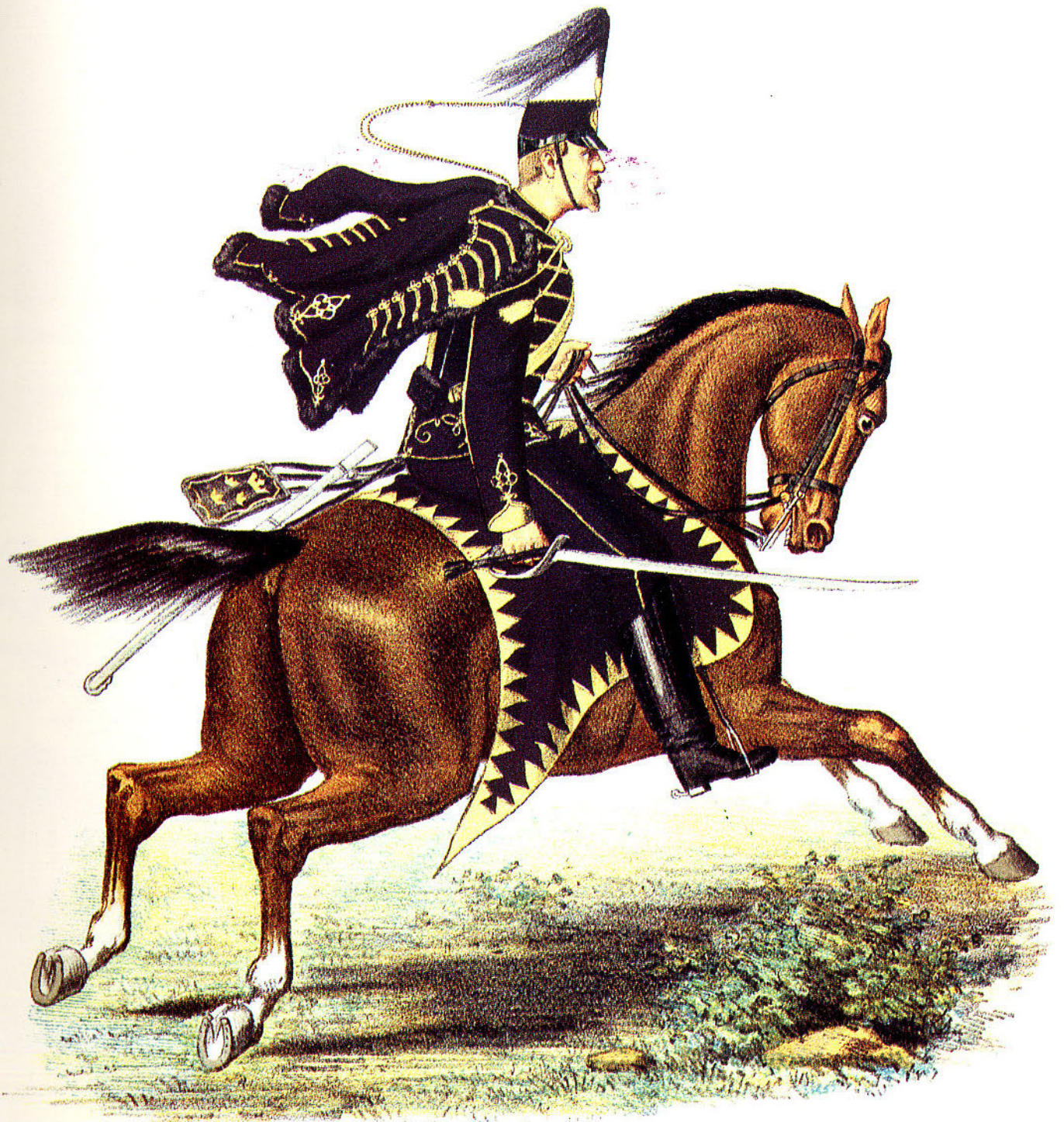
bricole, s.
bridge, s.
b. classification
b. company
b. head
b. head line
b. train

b. unit
 air **b.**
 bascule **b.**
 foot **b.**
 pontoon **b.**
 portable steel **b.**

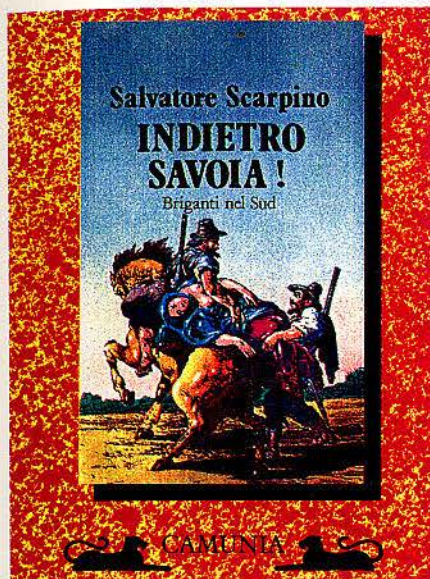
snow **b.**
 suspension **b.**
 three spanned **b.**
 to **bridge**, v.t.
bridoon, s.
brief, s.

breccia, infrazione, violazione
 infrazione disciplinare
 venir meno al dovere
 violazione all'ordine pubblico
 chiudere una breccia
 aprire una breccia
 aprire una breccia nella difesa
 rompere, infrangere
 rompere le file
 rompere il passo
 scoppiare, prorompere
 uscire da un accerchiamento
 iniziarono le ostilità, scoppiò la guerra
 disgregazione, rottura, interruzione, divisione in parti, insuccesso
 l'insuccesso dei negoziati
 rottura
 rottura del contatto
 rottura (sospensione) del combattimento
 abbandono dell'inseguimento
 penetrazione (nelle linee nemiche)
 corazza, pettorale (di cavallo)
 culatta (di cannone)
 otturatore (di cannone)
 arma a retrocarica
 alloggio dell'otturatore
 brevetto, nomina, promozione
 consegnare il brevetto, conferire una promozione onoraria a un ufficiale
 briccola, sopraspalla
 ponte
 classificazione dei ponti
 compagnia pontieri
 testa di ponte
 limite di testa di ponte
 compagnia di genieri, con materiale per la posa di un ponte
 unità pontieri
 ponte aereo
 ponte levatoio
 passerella
 ponte di chiatte
 ponte metallico scomponibile
 ponte di neve
 ponte girevole
 ponte a tre campate
 costruire un ponte sopra
 bridone
 istruzioni sommarie

to brief, v.t.	riassumere per sommi capi, inquadrare, dare istruzioni	b. dispatch	spedizione di materiale in grande quantità
briefing, s.	esposizione (di situazione), il dare istruzioni, rapporto breve, inquadramento	b. loaded	caricato alla rinfusa
b. room	sala rapporto	the b. of the army	il grosso dell'esercito
operational b.	inquadramento operativo	bull's eye, s.	centro di bersaglio
brigade, s.	brigata	bulldog, s.	grossa rivoltella
b. administrative area	zona sotto l'amministrazione della Brigata	bulldozer, s.	apripista
alpine b.	brigata alpina	bullet, s.	pallottola, proiettile
armoured b.	brigata corazzata	b. proof	blindato, a prova di proiettile
fire b.	(corpo dei) pompieri	armour piercing b.	pallottola perforante
b. headquarters	quartier generale di brigata	armour piercing incendiary b.	pallottola perforante incendiaria
b. landing team	squadra di sbarco della brigata	dummy b.	proiettile a salve
b. routine order	ordini di routine	explosive b.	pallottola esplosiva
to brigade, v.t.	unire in brigata	incendiary b.	pallottola incendiaria
brigadier-general, s.	generale di brigata	bulletin, s.	bollettino, comunicato
b. General Staff	Stato Maggiore di Brigata	war b.	comunicato di guerra
brigantine, s.	brigantino	bulwark, s.	bastione, spalto, baluardo
brinkmanship, s.	lo spingersi, nell'azione politica, fino all'estremo rischio di guerra	bump, s.	gobba (di terreno), protuberanza
broadcast, ag.	radiodiffuso	bunker, s.	fortino, rifugio sotterraneo, opera difensiva permanente
b. controlled air interception	intercettazione aerea basata su commento radiodiffuso	burial, s.	sepolture
broadcasting, s.	radiodiffusione	b. of the dead	sepolture caduti
b. station	stazione radiotrasmittente, emittente	b. and graves registration	registrazione tombe e sepolture
to broadcast, v.t.	trasmettere per radio	emergency war b.	sepolture d'emergenza
brother, s.	fratello	burg, s.	fortezza, città fortificata
b. in arms	commilitone	burn, s.	bruciatura, ustione
buckshee, s. (sl.)	razione supplementare, paga supplementare	burned, ag.	ustionato
budget, s.	bilancio preventivo	to burn, v.t.i.	bruciare
Budget and Finance Division	Ufficio Bilancio e Finanza	to b. down, v.t.i.	radere al suolo con un incendio
buffalo, s.	mezzo corazzata anfibia	burner, s.	bruciatore
buffer, s.	respingente, paracolpi, tampone	burnout, s.	fine della combustione
b. distance	margine di sicurezza	b. velocity	velocità di fine combustione
b. State	Stato cuscinetto	burst, s.	scoppio, esplosione, raffica
b. zone	zona cuscinetto	b. of gunfire	raffica di fucileria
nuclear b. distance	margine di sicurezza nucleare	b. of machine gun	raffica di mitragliatrice
bugle, s.	tromba	centre of b.	punto di scoppio (di ordigno nucleare)
to bugle, v.t.i.	suonare la tromba, chiamare a raccolta a suon di tromba	high air b.	scoppio aereo alto
buglemaster, s.	capo trombettiere	low air b.	scoppio aereo basso
bugler, s.	trombettiere	nuclear air b.	esplosione nucleare in aria
building, s.	edificio, costruzione	nuclear sub-surface b.	esplosione nucleare sotto la superficie
built, ag.	costruito	nuclear surface b.	esplosione nucleare in superficie
b. up area	zona abitata	nuclear underground b.	esplosione nucleare sotterranea
combat in b. up area	combattimento nell'abitato	nuclear underwater b.	esplosione nucleare subacquea
b. up time	tempo di mobilitazione	thermonuclear b.	esplosione termonucleare
bulk, s.	massa, grande quantità	butt, s.	calcio (di arma)
		butts, s.	poligono di tiro
		buttress, s.	contrafforte
		by, prep.	vicino
		stand by	tenersi pronto per una azione







Salvatore Scarpino - "Indietro Savoia! Briganti nel Sud", ("Go Backwards Savoia! Brigands in the South"), published by Camunia, Lire 28,000.

Camunia has just published an essay by Salvatore Scarpino: "Indietro Savoia!" subtitle "Briganti nel Sud".

The book awakes the reader's curiosity and makes him wish to go into the details of the various events. The language is fluent and the style engaging while the form is that of a historic novel.

On May 22, 1859 Ferdinand II of the Two Sicilies died and his twentythree year old son, Francis II succeeded him to the throne. Less than two years later, on March 17, 1861, the Unity of Italy was proclaimed.

During the celebrations, in several areas of the South such as the Sila, the regions of Potenza, Sannio, Molise and Abruzzo, bands of tattered, angry reactionists got together and gave rise to the well-known phenomenon of brigandage. This was formed by land workers, raiders, soldiers of the dissolved Bourbon army and followers of Garibaldi. Their aim seemed the restoration of Francis II (who, after the surrender of Gaeta on 13 February, 1861, had gone into exile in the Papal States), but in fact their scopes were multifarious and diversified. Both in the North and under the Bourbons, the law on compulsory military service was unfair and based on "replacement" which put all the weight of conscription on the peasants and the destitute. When the Garibaldi army was dissolved, many of his followers resorted to brigandage to avoid conscription under the Piedmontese regime. The book speaks of Carmine Crocco Donatelli, general of the peasants and commander of the tattered army, of women such as the Calabrian

"Ciccilla" Oliverio "mistress of brigands" mentioned also by Alexander Dumas, reporter of Garibaldi's expedition.

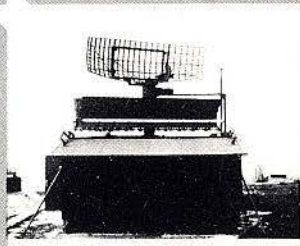
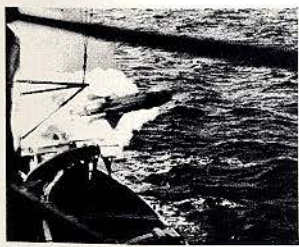
Scarpino writes in an engaging manner about the conflict of two worlds, the barbarity, the summary executions, the decapitations and public exhibitions of corpses, the spoliations of entire villages, the pillages, rapes and personal feudes, the burnt houses and plundered churches which were present with horrible equity on both sides.

"The reactionary blaze was thus due to military, political, economic and social reasons. Regrets and deceived hopes also did their part. People were hungry, upset and exhausted by inflation and the increased fiscal pressure and the clergy, fearing the liberal aggressiveness and directly concerned by the laws on the estate, sowed the seed of discontent".

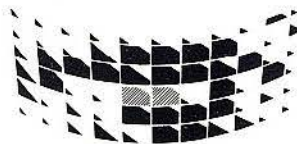
The brigands turned to reaction, violence and unrest which split up in many different military episodes without ever becoming a well-coordinated movement capable of turning the single reactions into a strategic military event.

In conclusion, the main characters of a drama on the scenes of history represent sad and inglorious aspects of post-unitarian Italy and the author's analyses, at the end of the essay, on the single protagonists (Bourbon regime, brigands, Savoia regime) are sharp and inappellable as well as objective and understandable.

40 YEARS EXPERIENCE



SMA is a flexible company founded in 1943. Since 1948 has been active in design, development and production of electronic equipment for defence. Main activities are radars for ground, shipborne, airborne, missile applications and related display systems. The company broad spectrum permits the supply of turnkey systems tailored to the end-user needs.



SMA

SEGNALAMENTO MARITTIMO ED AEREO

SMA's basic product lines and business sectors include: High definition and discrimination coastal radar control stations, both for maritime traffic management systems and military application (anti intrusion, coastal defence, mine splash detection); Shipborne navigation /search radars devoted to low, very-low air coverage (anti sea skimmers); Missile active homing heads, provided with a variety of ECM devices, for SSM (OTOMAT MK2) and ASM (Marte MK2) applications; 360° coverage search and navigation airborne radars for helicopters and maritime

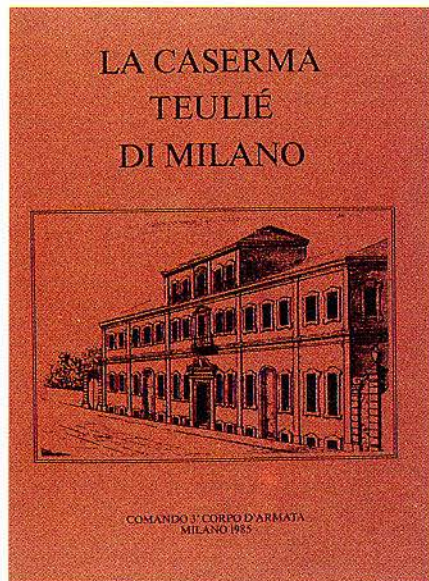
patrol aircraft; Standard Pod contained search radars for fixed wing aircraft to be employed in conjunction with ASM; Integrated search and tracking radars for A/A defence to be employed both on specialized trucks (OTOMATIC) or on semi-mobile/fixated station for point defence; applied research aimed toward millimetric waves (up to 100 GHz) in active and passive sensors (radiometer); Duct analysis and electromagnetic propagation forecast.

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"Brigands could not but be defeated, their enemies however could have done better. From that tragic decade of the Evil unit we have inherited misunderstandings and poisons which are difficult to eliminate". These are the trenchant expressions, both exhaustive and admonitory, with which the author ends his book.

Raffaele Pugliese



M. Grasso - R. Nicolai, photographs by G.E. Stern, "La Caserma Teuliè di Milano" (The Teuliè Barracks in Milan), 3rd Army Corps Headquarters, Milan, 1985, 109 pages.

This book comes out together with other initiatives by Army General Staff designed to enhance military buildings of historic and artistic interest and to which the 3rd Army Corps Headquarters has already contributed with the monographs on Palazzo Cusano and the Library of the Military Garrison, both situated in Milan.

The "Teuliè" Barracks, the oldest building in the chief city of Lombardy occupied by a military Body, represents the close relationship between the city of Milan and the military institutions since, from the Middle Ages onwards, the building has always been used for public functions such as philanthropic works and army schools and institutions.

Until 1671, the present "Teuliè" Barracks contained a hospital which, in the XVth century, specialized in the treatment of children and in the XVIII century became a School of Arts.

After a few years it became a monastery and some time later General Pietro Teuliè (minister of war during the Cisalpine Republic, he carried the first Italian flag in battle at Arcole) turned it into a home for veterans, disabled and orphans.

In the nineteenth century the former monastery became a military college under names which changed according to the various regimes (Military Home for Orphans during the Italian and Cisalpine Republic, Royal Boarding House for Military Orphans

during the Kingdom of Italy, Imperial Military College and Imperial College for Cadets during the Austrian domination). During the first war of independence the building also contained an Artillery and Engineers School.

After the annexation of Lombardy to the Piedmontese Kingdom of Sardinia, the building became the seat of the Military College and, in the late XIX century, it was transformed into barracks. In 1935 it underwent a radical change and became a Military School. This remained until the second World War when it became the "Teuliè" Barracks, now seat of the Military Area Headquarters.

The book contains an important set of reproductions of documents of various periods illustrating the architectural changes of the building and the most salient events regarding the various Institutions.

As far as uniforms are concerned, the pictures of the people belonging to the different military organizations staying, through the centuries, at the Teuliè barracks are particularly interesting.

Claudio Magris



M. Prato: "I cento anni della Scuola di Artiglieria" (A Hundred Years of the Artillery School), Rome, 1988, 294 pages.

1888-1988, two dates which contain a hundred years of intense, rich and pregnant history. For its hundredth anniversary, the Artillery School has just published a book which guides the reader through a century of military and national history.

The book underlines how the vocational and didactic activity has had to adapt to new techniques and procedures driven by a rhythm of development which has weighed heavily on commanders and instructors. It also gives the reader a concise image of the Institute and its activity both in times of peace and in war.

The book spans from the past, worthy of mention, to the present, rich in efficiency and looks to the future of Artillery based on

electronics and telematics.

In brief, this book, with its rich iconography, will spur the reader, especially the young reader, who will realize that, as stated by General Di Martino in his introduction to the book, "A hundred years of history of the School are in fact a hundred years of history of the entire Arm. History to be known and be proud of and from which to draw certainty for a future which — recalling the motto of Artillery — should be "always and everywhere at the service of the Motherland".



L'ESERCITO ITALIANO storia di uomini e armi

EDITALIA

AA.VV. "L'Esercito italiano, storia di uomini e armi", ("The Italian Army, a history of men and arms", Editalia, Rome, 1988, 303 pages.

"L'Esercito italiano, storia di uomini e di armi", reconstructs the history of the Army, from the first eighteenth century formations to our days, giving a global view of facts and developments as well as an accurate historic analysis.

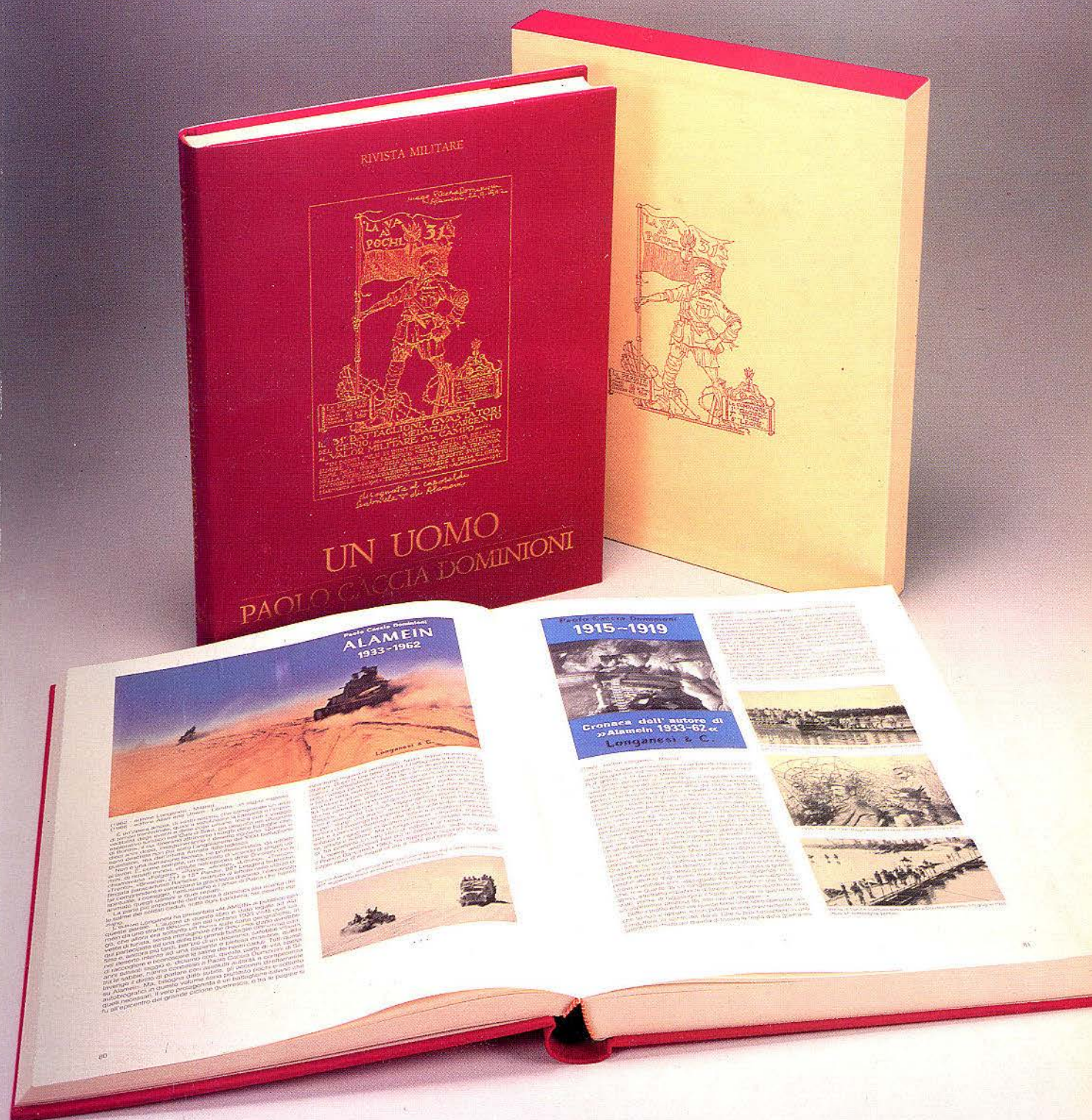
The book, third of a series, comes after one concerning Aviation and another regarding the Navy and is designed to bring to the knowledge of the reader the great problems connected with the very existence of a military organization in the wake of the traditions on which our *modus vivendi* is based.

The Army, a social organization tightly linked to the very tissue of the nation, must necessarily consider man as the central element of its structure in a relationship which, through conscription, is continually changing and developing at a speed not easily found in other organizations.

The book underlines quite clearly the present main lines of a modern Army, its technologic development and the programmes designed for ever more engaging tasks.

"L'Esercito italiano, storia di uomini e di armi", is, in fact, a book which offers readers an accurate and concise picture and is the starting point for a critical examination and an analysis of such a vast and complex subject.

dalla Rivista Militare
una grande opera per un uomo eccezionale



**UN UOMO
PAOLO CACCIA DOMINIONI**



RIVISTA MILITARE

JOURNAL OF THE ITALIAN ARMY FOUNDED IN 1856



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Development
and Tomorrow's
Society

★ **VITTORIO BERNARD**
Disarmament and
Security

★ **CESARE ROMITI**
Italian Economy in
the International
Outlook





ARTICLES
Technology Development and Tomorrow's Society
DISARMAMENT
Disarmament and Security
ITALY'S ECONOMY
Italy's Economy and International Outlook

In the mountains, where the ground is covered with snow and ice, mobility is of the utmost importance.

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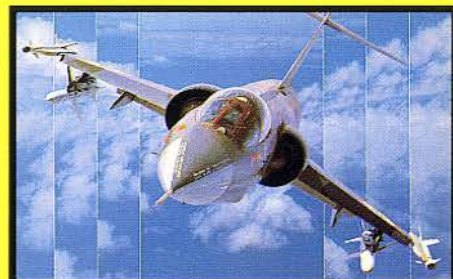
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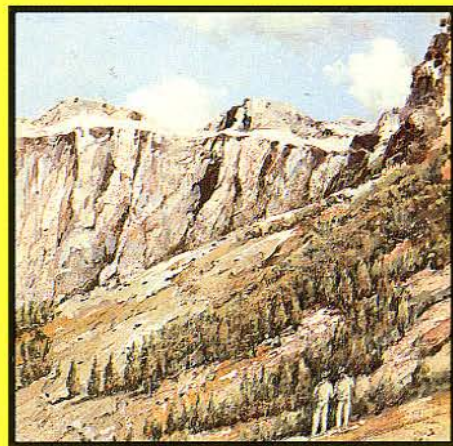
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TECHNOLOGICAL DEVELOPMENT AND TOMORROW'S SOCIETY

The progress of civilization has always followed the rhythm of the evolution of knowledge, as a distinctive mark of man among all the other elements of nature.

This is vividly testified by history for in every event transmitted to posterity, history expresses the stages of an unbroken progress occurring in a constant dialectical condition.



In particular, science, in the strictest sense of the word, accomplishes the victorious process of spirit over matters in concrete, immediately verifiable forms.

Nevertheless, the function of the world as a cornerstone of civilization did not always have the same distinguishing features in the course of history.

From an extremely generalized point of view, two main trends can in fact be remarked in the relation between scientists and society. These are the two common denominators around which multiple factors and composite phenomena have coagulated, as facets of the same evolutionary reality.

The first "system" can be placed, in a broad sense, between prehistory and the 17th century: science remains a mere activity of research and pure theory, avoiding the "contaminatio" with the application techniques of discoveries and inventions, as well as with innovation.

Society makes use of the scholars' inventions and experiments through a complicated mechanism of mediations, which helps increase the isolation of the sphere of knowledge and to widen the gap between the latter and the working world.

After 1600, the coming of Enlightenment and of the great sociopolitical revolutions create more and more bridges between the opposite sides, and the results of theoretical and experimental research head towards the economic operators at all levels who appropriate them and obtain products of practical utility.

We have thus the second trend, i.e. the conviction, increasingly shared by the repositories of knowledge, that science ought to be at society's service in order to better the living conditions.

There is a gradual evolution from invention to innovation, from theory to practice which marks and ennobles the times after the 17th century.

The philosophy of positivism, started in the 19th century, introduces into civilization the ethics of concreteness and foreshadows the



The disturbing interrogative about the quality of life and of tomorrow's civilization encloses the primary and real problem that confronts modern man, who is thrilled by his wonderful inventions and, at the same time, humiliated by their effects.

ensuing experience of pragmatism which is the actual doorway to the characteristics of present society.

Knowledge and technics are increasingly amalgamated and boost each other in a productive osmosis which tends to accelerate with growing intensity the process of interdependence of the various components of modern "culture" free by now from old distinctions which were often based on prejudice.

The product of intellect branches out and spreads through thousands of runlets predisposed by the industrial and artisan world, becoming

ing a general possession and evidence of the full realization of man.

The systems of implementation of the scholars' "suggestions" evolve, giving birth to a proper pseudoscience for the organization of the various techniques.

Technology is thus born as an effort to coordinate phases and more and more sophisticated building methods, with the aim of supplying society with products suited to the growing individual and collective needs caused by economic changes and by the lively dynamics of civilization which characterizes



Although it is evident, in view of the facts, that the industrial component tends to absorb and sometimes penalize artisanship, both concur in giving the market a considerable amount of products in harmonious integration.

our times.

Hence the birth and increasing diffusion of the concepts of reality, according to which science is to technics what invention is to technological innovation.

The substantial difference between the technological and technical worlds consists precisely in the analysis and planning functions of technology, aimed at rationally organizing the technical working methods and systems with a view to obtaining products more and more suited to the various re-

quirements and at the lowest possible cost.

That is why one can speak of "technology" only when referring to industry while "technics" must be ascribed also and prevailingly to artisanship or to limited activities of transformation.

Although it is evident, in view of the facts, that the industrial component tends to absorb and sometimes penalize artisanship, both concur in giving the market a considerable amount of products in harmonious integration.

Except for some categories of goods, there is a considerable excess of supply as compared to the essential needs.

Hence the consumers' culture, which entangles modern society in an absurd mechanism which is by now unescapable because it involves interests of huge proportions. Suffice it to think of the economic weight of publicity, fashion, second-hand goods trade, of the enormous circulation of money which supports primary activities for the national economies.

At the bottom of this race to consumption there are numerous psychological and social factors, but it is a given fact that it takes the shape of an apotheosis of the ephemeral and the superfluous, with the ensuing changes in customs and even in morals.

Opposite this negative implication there are positive elements, such as a greater possibility to create new jobs in the producing industries, wider circulation of money, the raising of the less prosperous, who can avail themselves of goods that were beyond their reach in the past, the levelling of the social "classes", at least in the light of some fictitious "image values".

The traditional "status symbols", prerogative of the lucky few, have undergone a radical change in social consideration and have spread with apparently effortless penetration, especially within the middle classes.

The century-old forms of direct or indirect domination of the wealthy classes have been mostly cancelled by the present reality, favouring the raise of a real spontaneous democracy, experienced and fostered in the daily facts of life.

Unfortunately, remnants of social inequalities are still present in underdeveloped countries and in nations whose local conditions are linked with political or traditional factors which resist the battering-ram strokes of the new times.

But the remarkable diffusion of the advanced cultures, helped by the exciting advances in the "science" of communications which is taking

place in the mass-media, will certainly bear its fruits with time, and promote a greater awareness of human and civil dignity.

It is certainly an illusion to believe that the more advanced societies have reached a true equality under the aegis of the fundamental democratic principles, considered eternal and immutable.

It seems more realistic to say that the advent of the technological era has produced the levelling of only the exterior manifestations of the quality of life. We have not reached a real cultural expansion capable of involving every social component, albeit with the understandable individual differences as regards intellectual education and global preparation.

The main causes can be traced back to the extraordinary existential transformations brought about during the last forty years of "civilization of the machine" which, due to its natural limitations, has been able to affect mainly the pragmatic aspects, openly showing its inability to provide a concrete answer to the moral and spiritual questions.

As a matter of fact, the latter have become more critical, having been overwhelmed by the progressive intrusion of an arid mechanicality.

Indirect evidence of the widespread interior discomfort are certainly a perceptible return of the young to religion and a greater attention to the alarming ecological impairment; reactions which conceal a convinced willingness to contrast the technological oppression.

These are the emerging forms of an **increasing conflict between scientific rationality**, necessarily alien to moral problems, and the **irrepressible demands of the soul** which may be dormant sometimes but are always vital and ready to proclaim their rights.

Attempts at reconciling the two positions have been made, are constantly under the attention of qualified components of public opinion and are expressed by cultural, confessional and sociohumanitarian movements.



At the bottom of this race to consumption there are numerous psychological and social factors, but it is a given fact that it takes the shape of an apotheosis of the ephemeral and the superfluous, with the ensuing changes in customs and even in morals.

These are the symptoms of wider issues which will have to be discussed and better defined in a future which is already starting and is marked by the disturbing interrogative about the quality of life and of tomorrow's civilization.

This dilemma expresses the primary and real problem that confronts modern man, who is thrilled by his wonderful inventions and, at the same time, humiliated by their effects.

This phenomenon is progressively altering the structure of collec-

tive and interpersonal relations to the point of undermining the innate processes of thought in order to adjust them to the accelerated pace of the mechanisms.

Consider, for instance, the enormous diffusion of computers among the young and especially among students.

This results in a reduced effort of reflection and memory training, and the almost complete elimination of the deductive abilities of man, which are entrusted, instead, to complex electronic systems.



The entire society, even in the elementary daily activities, risks to be subject to a myriad of automatisms in whose besieging concatenation the will is dispersed and personality is inhibited.

The sociologists of the thirties had denounced the humiliating automatism of action of the men working at the assembly lines.

After a period of reversal of trend, we risk to go back to the same condition, entrusting the operators with the mere task of "assisting the machines".

"Robotization" is proceeding at the same rate; if on the one hand it offers considerable economic and industrial advantages (for instance in the production of automobiles), on the other it confines the workers to the ranks of mere overseers.

The entire society, even in the

elementary daily activities, risks to be subject to a myriad of automatisms in whose besieging concatenation the will is dispersed and personality is inhibited.

We would indeed fall victims to a biological mechanism the preconditions of which are represented by the advent of genetic engineering, which is not always performed in due form and with ethical purposes.

"Monsters" and "automatons", made famous by science-fiction writers, could be at the door.

Apart from such extreme degenerative deformations of future civilization, quite clear are the chief

causes of the progressive loss of humanity which appears unacceptable from all points of view.

Essential expressions of it are the absence of moral independence and the lack of choice and of creative autonomy.

These are the qualifying aspects which distinguish a real society from a group of individuals organized according to predisposed and coercive schemes, where there is no place for fantasy and for the ethic dimension of existential reality.

Without these principles, the civil life of the future could only advance in its material aspects, such as the expansion and better sharing of wealth, the demographic growth with the ensuing proportional production of goods, the acceleration of industrial processes.

The rapidity of transports and exchanges will encourage the onset of a more widespread consumers' culture in every sense, which will bring the underdeveloped areas close to the more prosperous ones as regards living standards and customs.

Communications will employ science-fiction devices, extraordinary vehicles of information broadcast practically in real time, which will crowd and press the recipient.

The outcome of this hail of news will only be confusion and disorientation, to the detriment of a well pondered and productive interpretation of the facts.

Such situation, upsetting in itself, will have absolutely tragic aspects because the technological product of intelligence could preposterously contribute to do away with the remnants of the individuality of thought and orientation.

Hence a "civilization" that can be called amoral in its "scientific" structure, because it would consist of unescapable mechanisms, outside which there can be only isolation from the system or the short-lived and useless rebellion of visionary Don Quixotes.

But in such an apocalyptic picture the windmills of Cervantes' hero do not appear as mirages, because they are a mainstay from which the ideal

motivations of moral and spiritual redemption begin.

The teachings of philosophical idealism, therefore, find their corroboration in the dialectical dimension of existence which, in opposition to every historical phenomenon, sets a reaction capable of reversing conditions which appear definitive, in a cycle of continuous regeneration.

If technology produces automatisms which humiliate and limit the freedom of choice, the universal thought and the universal spirit create the forms capable of producing the sublime reaction of moral reality.

Man's revenge is certain because thought only appears liable to be dominated by its own accomplishments.

In a mechanistic society, marked by standardization of behaviour and acceptance of the false myths of a consumers' culture, the intellectual activity produces the most qualified effort because it must meet complex organizational needs and comply with the particularly vehement dynamics of social demands.

Vis-a-vis the traditional organization of society, in the future the wider diffusion of goods will be a permanent stimulus for the cultural operators, to whom humanity especially and permanently entrusts its conquests and its wish to progress.

Thus the machine is again a tool consisting of astonishing mechanisms, but subjected to civilization, which is above all the outcome of a reevaluation of ideas, of the analysis and interpretation of the present, in order to create the preconditions for the future.

The man-subject reasserts its innate functions of driving pivot of the world-object in a continued renewal of Kantian centrality.

The Sophists used to say that "man is the measure of all things", with a surprising and not always understood modernity.

It is a canon of eternal validity, which cannot be affected by the apparent autonomy of the machine.



A perceptible return of the young to religion and a greater attention to the alarming ecological impairment are reactions which conceal a conviced willingness to contrast the technological oppression.

One should not forget, moreover, that Schopenhauer defined existence as a will to live, i.e. a continuous tension of wishes and impulses which is history's mysterious mainspring.

Consequently, the society of electronics and artificial satellites, of interplanetary travel and bold exploration of our galaxy, which violates deep space and the abysses of the sea, implies, paradoxically, the triumph of man in forms unequalled in the past.

It is the "ego" that dominates, the ego that creates, the ego that transforms, the ego that moulds the

quality of life according to his will.

Homo sapiens glories in the epic contest with mystery, verifies his skills and improves them putting himself to the test against the immeasurable dimension of thought.

In the near future, technology is indeed going to be the direct operative instrument of this eternal reality, as a precious support of creative intelligence, irreplaceable prerogative of mankind, which, through it, perceives the divine afflatus.

Ciro Di Martino

DISARMAMENT AND SECURITY



For mass media and the greater part of public opinion, the word "disarmament" has become synonymous of the word "peace" and, as we all want peace, we all ask for disarmament forgetting the old Latin saying "si vis pacem para bellum", while several parts of the world are still bathed in blood by war and guerilla warfare.

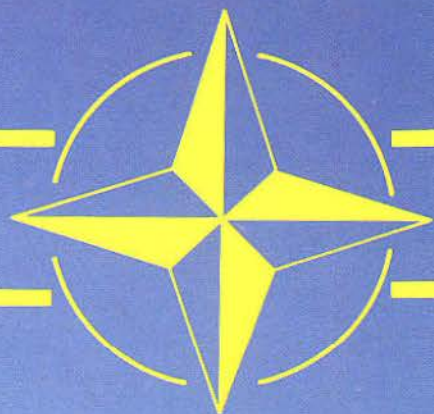
Thus, even the term "security" which according to the logic of history goes abreast the word "peace" more than "disarmament" does, seems to have been forgotten. Those, however, who do not follow fashionable slogans and who try to give themselves an explanation of political events, on the basis of the experiences of history, will certainly have wondered: "Are weapons the cause of war? Is it really convenient to disarm if the Armed Forces of NATO and its nuclear weapons in particular, have so far guaranteed the longest period of peace history has ever witnessed on the European continent? Could it not be more dangerous to disarm than to continue to arm moderately as done so far? Can we really trust the new Kremlin leader, Gorbachev's peace and disarmament proposals?"

According to me, these questions are quite justified. The aim of this article is thus that of giving an answer to these queries with a sense of realism as regards the future of the negotiations under way between the Atlantic Treaty and the Warsaw Pact. I shall also try to define what cares should be taken to avoid that disarmament invalidate our security and bring consequent threats to peace which may be more serious than those already existing.

However, to deal with this issue it is necessary to examine the causes that have led to the armament race and which should be eliminated for really efficacious and safe results.

As regards the above, I shall divide the article into three parts: the past, until Gorbachev's leadership, the present, from 1985 to nowadays and the future.

A NEW CHALLENGE FOR THE ATLANTIC TREATY



THE PAST: ORIGIN AND DEVELOPMENT OF THE ARMAMENT RACE

MILITARY POLICY AND USSR STRATEGY

When the 2nd World War ended, the allied armies of the Western World demobilized while the Red Army remained on a war footing with the imposing mass of its forces.

There were two reasons for this: because Stalin wanted to impose the communist regime on the occupied Countries and because he feared the West's attack on his new developing Empire or a strong politico-military pressure which seemed

possible due to the fact that the United States alone possessed nuclear weapons.

However, even when some time later the Soviet Union exploded its atomic bomb and established pro-Soviet governments in the occupied Countries without the West opposing any really threatening reaction, it continued to maintain its military war apparatus with a great number of Divisions deployed right behind the "iron curtain" which divided the world in two.

Obviously, there was another reason for extending in time the state of readiness and advanced deployment of so many forces. This reason has remained the basis of the military policy and strategy of the Soviet Union to our days and it must be borne in mind while negotiating on disarmament with Moscow.

According to Kremlin Leaders' reckoning, the Soviet Union has a "security suited" to guarantee the stability and survival of its empire only if its Armed Forces are able, in case war breaks out, to conquer Western Europe, in an extremely short period of time, and that is in less than 30 days, before America can mobilize and move its reserves on this side of the ocean and transform its great economic power into a military strength to be employed in defence of the Old Continent.

In other words the Soviets, who have an economic power and thus a "war potential" inferior to that of America, have to take possession of Western Europe's resources (human, economic-industrial, technical scientific, etc.) to sustain with some chance of success a long lasting war



against the capitalist world's Superpower. In fact, without such resources and also in consideration of the Chinese threat hovering over them, they might resist long, but not win.

The above, obviously, in view of an essentially conventional war, for total destruction through the generalized use of nuclear weapons on both parts, would give them no advantage whatever and would leave them neither winners nor defeated. However, in Lenin's thought, a war between communist and capitalist Countries was considered inevitable, the almost natural consequence of class warfare.

This is the reason which brought the Soviet to seek, in the four decades following the war, a remarkable superiority of forces of all kinds over the Western World and to develop an extraordinary, gigantic race for armaments unprecedented in history and which demanded further sacrifices of the people of the Soviet Union and satellite Countries.

With this mighty effort continued in time which has absorbed and still absorbs about 15-16% of the GNP (consider that the average GNP percentage for NATO countries is 5%, while Italy dedicates it only 2.1%), percentage deemed only roughly true by the present Soviet Secretary of State for War, the Soviet Union has created the most powerful Armed Forces of the world: 5 million men, 211 Divisions, 52,800 tanks, 5,170 battle aircraft, 696 surface battleships, 373 submarines, 915 Navy battle aircraft, 4,224 strategic nuclear missiles.

Thus:

- it has maintained and strengthened on European soil a remarkable superiority in Warsaw Pact ready intervention forces as compared to those of NATO in a ratio about 2 to 1 as regards Divisions, tanks, infantry combat vehicles and aircraft and

3 to 1 as regards artillery.

The disproportion increases if we consider the mobilization reserves. The ratio of forces, however, varies greatly from one theatre of operations to the other;

- it has achieved superiority also as regards nuclear weapons, tactical ones especially;

- thanks to its war Navy it is in a position to prevent the flow of reinforcements and supplies towards Europe from overseas;

- militarily, it may intervene efficiently in all parts of the earth, called by favourable political situations, in support of pro-soviet regimes or movements.

Imposing Forces such as mentioned above have been used by Moscow as a means of repression within its empire and as a means of politico-military intimidation abroad, but they have also been employed to invade foreign countries (Afghanistan).

MILITARY POLICY AND NATO STRATEGY

The Atlantic Treaty, established in 1949 with defensive aims to face the massive and threatening presence of Soviet troops behind the "iron curtain", had obviously to rearm and prepare a complex of forces of various kinds apt to discourage an eventual aggression.

The superiority in quality and quantity of the nuclear armament of the United States and the adoption of the strategy of "massive response" with which the Washington Government engaged in response to any kind of attack from the East by launching atomic bombs on Soviet soil, gave way to an efficacious action of deterrence, without necessarily having to counterbalance the conventional forces of the Soviet Union and satellite Countries with the same number of units of the Countries of the Treaty.

The unitank potentiality of a modern army is of the utmost importance in order to oppose efficaciously the enemy armoured units.

This would have been considerably burdensome and would have detracted financial and human resources to the economic recovery of Europe after the destructions of war.

Moreover, when the Soviet Union, after about two decades, reached a rough equality with the United States as regards nuclear weapons and was able to strike the United States itself, the strategy of "massive response" no longer seemed valid.

NATO then adopted the doctrine of the so-called "flexible response" and decided to strengthen its conventional forces and put them in a position to drive back, on frontier positions at least (advanced defence), the enemy's first attack echelon, even if this meant using nuclear weapons first, with a gradual employment, escalating in time and space when the resistance of conventional forces became insufficient and thus making the enemy cease hostilities before turning to a generalized nuclear response.

With the political aim of avoiding war and not of winning it, and with purely defensive operational designs, the Atlantic Alliance so far has not had to face the Warsaw Pact forces man by man, tank by tank, aircraft by aircraft, missile by missile.

It has however, had to develop plans regarding forces and armament production aimed at containing the power disproportion of the relative military instruments on our continent within a limit apt to make the enemy uncertain as to who would win the battle for the conquest of Europe in the short term required.

With an amount of forces divided into three main items — nuclear strategic, theatre nuclear and conventional — the Atlantic Alliance has sought and obtained a "general strategic balance" and not a balance of each item with that of the enemy. Albeit not relinquishing the deterrent effect of nuclear weapons, it has had to strengthen considerably its conventional forces, especially in the last decade.

COMPARISON OF STRATEGIC PLANS

We may thus conclude from the above that the armament race by the two blocs was caused and developed on the basis of two completely opposing concepts of "security".

The first, the Soviet one, needs superiority to be able to conquer Western Europe in less than 30 days, possibly without having to employ nuclear weapons, and take possession of its uninjured or little damaged resources.

The second, that of Nato, only wants to resist at least more than 30 days, employing nuclear weapons if necessary, to allow the flow of reserves from over the Atlantic and contain, however, the attack as far

C-130 of the 46th Air Brigade. The air transport of the fighting units is essential for a rapid deployment of forces.

forward as possible without having to surrender vital areas to the enemy.

It is obvious that, with such different concepts, a proportionally balanced equilibrium of the various opposing forces — to be achieved through a gradual disarmament process — would mean "insecurity" for the Soviet Union, in the likelihood of an armed conflict. For NATO, instead, it would signify a substantial improvement of the present situation, chiefly based on American nuclear weapons but made uncertain by doubts whether they would really be ready to employ them in defence of Europe and risk destroying their own cities.

This explains how, in the dialogues at a distance between the two blocs and in the direct negotiations which have taken place in several headquarters, the Western bloc has always tried to make the principle of balanced equilibrium accepted and to agree upon a limit of forces of each kind as the final objective to be achieved, while the Soviet bloc has tried to obtain a kind of official recognition of the positions and advantages already achieved, together with a limit to the strategic nuclear armament race and a stop to the countermeasures planned or already under way which the Western world might have continued to develop.

This appears obvious even from a rough analysis of the results of the negotiations which were held during the period under consideration.

During SALT 1 and 2 it was agreed to limit the strategic nuclear weapons of the two superpowers and negotiations gave the Soviet Union some advantage as regards carriers.

With the ABM treaty a limit was put to the antimissile defence system of the two parts which, together with the limitations of SALT 1 and 2, safeguarded the capacity for mutual destruction and, in practice, neutralized the respective strategic arsenals.

With the conference on security and co-operation in Europe (CSCE), the Soviet Union obtained the official recognition of its 2nd World War conquests (inviolability of the boundaries established during the war) in exchange of the promise that it would respect human rights and some measure of control of drill and troop movements in boundary areas.

However, the Vienna negotiations on the balanced reduction of forces in central Europe (MBFR) went on for over 14 years without any substantial outcome due to the Soviets' obstructionism.

Actually, for Soviet Union strategy, all mutual engagement which may limit or reduce nuclear weapons is to their own advantage while if conventional forces are limited or diminished it is to their damage.



THE PRESENT

ELIMINATION OF GROUND BASED THEATRE MISSILES (DOUBLE ZERO OPTION)

Gorbachev's leadership, started in 1985, marked the turning point in the domestic and foreign policy of the Soviet Union, but it did not affect the military policy, as I shall further prove, even though the agreement regarding the so-called "double zero option" concerning the INF or euro-missiles, signed in Washington last December, has brought an important change in the development of the long negotiations between the two blocs and an improvement in the quality of the above: from the "control of armaments" to a first "reduction".

The change took place in the Soviets' approach towards the negotiations and not in that of the United States and NATO which remained coherent to the so-called "Harmel doctrine", which became official in 1976 and acknowledged the need for continuing the process of strengthening and modernizing the forces of the Alliance to keep them in a position to accomplish their tasks of deterrence and defence, together with the opportunities of carrying on the dialogue with the counterpart in the seek for a mutual balanced reduction giving a higher guarantee of safety for a steady peace.

The agreement for the mentioned first reduction of theatre nuclear weapons as euro-missiles are also called, rewarded NATO coherence, its determination and its bravery, I would say, in driving back Moscow's intimidations.

Italy gave an important example of this by deciding, first among European Countries of the Alliance, to install cruiser missiles on its territory (Comiso) to face the threat of the "SS-20" and the attempt

at political blackmail.

Moreover, the above agreement which includes the elimination of 931 missiles by the United States (including the 72 "Pershing 1A of Federal Germany) and 1,836 by the Soviet Union, might seem at first sight very favourable to the West, but on the contrary it reduces the threat hovering over the Soviets and therefore NATO's capacity of deterrence in Europe while hardly affecting the Soviets' threat in our respect. They can continue keeping European countries under the fire of superior strategic weapons and tactical nuclear ones (range upto 500 Km) of which they have a much higher number (10-12:1).

No doubt, however, that the agreement is politically important for the policy of control which it demands as well as for the reduction which it introduces for the first time.

A 50% REDUCTION IN INTERCONTINENTAL STRATEGIC NUCLEAR WEAPONS

Meetings between Reagan and Gorbachev have given a considerable impulse to the talks being held in Geneva since March '85 concerning the 50% reduction in intercontinental strategic nuclear weapons as well as to those regarding space defence. (Nuclear and Space Talks).

As well known, it was hoped that negotiations might have a positive conclusion before the end of the present United States President's term of office and that he in person might undersign the new agreement. This hope may now be considered waned because of political difficulties regarding certain kinds of arm systems and technical problems concerning controls which are much more difficult than those regarding theatre missiles which will shortly be completely eliminated. Both



Lynx TOW Helicopter. Nowadays the antitank helicopter is the most efficacious response against an armoured unit offensive.

sides, however, believe that suitable solutions will be found and that the agreement will be reached shortly. However, it will not greatly change the ratio of forces of the two superpowers, nor of the two related blocs because it starts from a situation of near equality and hardly affects the mutual destruction capacity, which will only be mutually controlled. This too will thus have an important political significance and a limited military strategic effect, albeit reducing the United States' threat of a nuclear retaliation on Soviet Union territory to an eventual Soviet attack.

BAN OF CHEMICAL WEAPONS

Another favourable short term prospect of agreement concerns the ban of chemical weapons for which negotiations are under way in Geneva. This does not regard only NATO and Warsaw Pact countries, but many others too.

Everyone seems to want this and there have been many signs of goodwill on both sides.

The Soviets have informed on the quantity of chemical weapons they possess, showed the kinds they have and stated their determination to build a plant in which to destroy them. The British have given permission to visit their laboratories where chemical defence is studied.

The United States has disclosed its production plants. Both experts and non experts, however, wonder how one can see whether the relative toxic substances are produced for they are now very easy to manufacture as Iran and Iraq have proved during the recent war and just as easily disguised as other products of the chemical industry.

Bearing in mind the Soviets' considerable superiority regarding chemical weapons and the fact that they continued modernizing and empowering their arsenal while

Americans stopped production for over twenty years (production was started again only recently for reasons of deterrence with the so-called binary gas which becomes harmful only while going through the bullet container) their actual and verified destruction would greatly reduce one of the most serious threats now burdening the NATO forces.

The above because their employment, in support of a conventional attack, would greatly increase the penetration capacity as the protective equipment of several Allied armies, including the Italian one, is scanty and not very efficacious, as are, generally speaking, their troops. In fact, NATO has so far considered reacting to a chemical attack mainly with nuclear weapons.

Hence, an agreement on the elimination of chemical weapons would make a war carried out with nuclear weapons, as a means of retaliation though with a limited and selective employment, much less probable.

Obviously, such an agreement would not eliminate the need for protective equipment and relative training, for it must not be forgotten how easy it is to evade production controls in time of peace and start production of new chemical weapons in time of war.

CONVENTIONAL STABILITY (CST)

Under the thrust of the new relations between the United States and the Soviet Union and Gorbachev's declared willingness to reduce conventional forces and eliminate the disproportions existing between the two alliances, new talks called CST (Conventional Stability Talks) started last year in Vienna within the CSCE, designed to reach a balance as regards conventional weapons too, bringing them, if possible, to a lower level than the present one.

The above talks have not replaced negotiations on the MBFR because it has

not yet been decided who will take part in the talks, whether only the countries of the two blocs or also other non-alligned European countries. Neither have the modalities nor the mandate to be granted to negotiators been defined.

So far it has only been a question of preliminary talks, but one can already see that objectives and points of view differ considerably.

Negotiations, for example, should concern Europe, from the Urals to the Atlantic Ocean, but the definition of the area concerned already causes difficulties because Turkey also borders Asia. The Soviets want all European countries, as well as American and Canadian, to take part in the negotiations, while NATO wants negotiations to be limited to the countries of the two alliances at first and later involve the other countries in succession of time.

The Warsaw Pact wants to discuss tactical nuclear weapons or SNF (Short Nuclear Forces) and double capacity arm systems, that is conventional and nuclear. It also wants to establish denuclearized areas as soon as possible.

Certain NATO countries believe that such weapons or arm systems should be the object of separate negotiations after essential measures have been taken to stabilize conventional forces. Federal Germany, moreover, seems in favour of the Eastern bloc proposal for obvious reasons of domestic policy.

However, some steps forward have been taken and the Soviets have given in on some important points.

We thus hope to start negotiations true and proper by the beginning of next year. These will be the testing bench for the Soviets' real intentions on the one hand, and for the solidarity of the Atlantic Alliance on the other.

The problem shows difficulties of a political kind, but mainly unprecedented military-strategic and operational problems because we shall have to verify a considerable number of different elements on a very vast territory.

We shall thus almost have to invent a new science or "art" to be added to strategy tactics, logistics, personnel: the science of disarmament and armament control.

The "new challenge" rises from the above problems and not only from these as I shall further explain, and puts our Alliance before the fact that each step of the process towards new balances of forces, will have to be taken without diminishing the security. This is no easy task.

As regards this issue, all I can do is define the stages of the conventional disarmament process in Europe:

AMX of the Military Aviation. Air support is particularly important on the battlefield in order to facilitate the advance of attacking units.

- elimination of the differences and disproportions regarding elements having a greater destabilizing effect and thus of armaments more suited for surprise attacks or large scale offensive operations, such as tanks, artileries, infantry combat vehicles, airborne forces. This obviously requires an exchange of preliminary data and a mutual control of the latter on the basis of information already held by both sides. Such elimination of differences would bring substantial reductions in forces by the Warsaw Pact and particularly in the Soviet ones in advanced deployment in satellite Countries;

- a first establishment of a control system on the spot, in addition to those supplied by special technical means (satellites);

- a subsequent, further mutual reduction which may also concern other kinds of forces, both of ready intervention and mobilization, until a global limit is reached. This is to be fixed beforehand together with eventual partial regional limits and must take into account the demands of self-defence and the geographic differences between the two blocs and the Countries concerned;

- a consequent extension of the network of mutual controls;

- the transformation of part of the units, especially those that must remain deployed on border areas, into units of an essentially defensive kind, that is with a limited breakthrough and penetration capacity (e.g. motorized infantry or "blocking" infantry rather than mechanized).

In conclusion, the "present" has brought forth a substantial change in the relations between East and West. the first real agreed reduction of forces has taken place and peace proposals have been discussed, which are far more interesting than Khrushchev's or the ones introduced by Brezhnev's détente. This is because Gorbachev has changed the Kremlin's foreign policy and not because the United States and the Atlantic Alliance have changed.

The above ensues from the agreements already established and from the ones expected from negotiations under way as well as from the other written or unwritten agreements of greater or lesser importance which have allowed to cease or reduce conflictuality in other parts of the world (e.g. Persian Gulf and Southern Africa), reduce the risk of accidents, survey heretofore secret data and information, and thus increase mutual trust. All this is so extraordinarily different from the past that it still seems unreal.

Its impact on international public opinion almost makes the new Kremlin leader look like the only true artificer of world peace.



THE FUTURE

EVALUATIONS ON PAST AND PRESENT

Before attempting to outline the future, as regards the possibilities of achieving a new balance of forces in Europe, at lower levels than at present and in more secure and steady conditions of security, it is necessary to evaluate the past and the present and compare facts with Gorbachev's words. Moreover, before drawing conclusions, we must also remember that the general strategic balance which has blocked Soviet expansionism in Europe as so far been based essentially on the threat of nuclear weapons employed by NATO to make up for the conventional armament superiority of the Warsaw Pact. As regards the past, we must not forget that the objectives of the military and foreign Soviet policy as regards the West have essentially been the following:

- achieve and maintain an important superiority of forces apt to conquer Western Europe, in case of war, in a very brief lapse of time and possibly with the sole employment of conventional forces;

- prevent or limit, in view of the above, the Atlantic Alliance's possibilities of employing nuclear weapons. This, both through the achievement of conditions of superiority and intimidation actions and with negotiations and negotiation proposals.

In fact, the only negotiations that the Soviets ended with agreements were those regarding the limitation and control of nuclear weapons while they froze the ones regarding conventional weapons (see MPFR);

- detach the countries of Western Europe from the United States. In sum, the main political and strategic aims during the Soviet leadership of Stalin and Brezhnev were to neutralize the threat to

Soviet security, weaken and divide the Western world.

The above is not so much due to ideological and class conflicts between communism and capitalism, but to historical and geostrategic reasons which have always prevented the two empires to co-habit peacefully, without one of them attempting to overwhelm the other and which compel the Soviet Union, economically weaker and, thus, weaker from a military point of view as well, to try to take possession of the territories and resources required to beat the antagonist.

As regards the present we must check and ask ourselves whether Gorbachev has really changed the politico-strategic aim of the Soviet leadership.

In fact, we may state the following: "yes" as far as words are concerned, but the facts are still to be seen even if he has established peaceful and friendly relations with the West, diminishing or reducing the most immediate and conspicuous reasons for tension and conflict.

This with the obvious aim of creating favourable exterior conditions for the domestic reorganization of the system (Perestrojka), which he has in mind to avoid the economic breakdown of the Soviet society.

GORBACHEV'S NEW WORDS

Even as regards relations between East and West and the Soviet military policy, Gorbachev's speeches have been far different from those of his predecessors.

Some of his words really came as a surprise, while others, though more élatante, obviously contained more propaganda than innovation and credible proposals.

Let us briefly outline the most meaningful concepts of the above without



CH-47 of the Royal Air Force. Helicopter borne troops allow a remarkable mobility of land forces.

however following the chronological order in which they were stated:

- gradually eliminate from the face of the earth all nuclear weapons by the year 2000, dismantle certain types of arms and establish denuclearized areas in zones at risk and immediately cease all nuclear experiments;
- eliminate all chemical weapons and prevent their production;
- apply a new "military doctrine" for the Warsaw Pact, based on the idea of "sufficiency" of forces, solely for defensive purposes, and not on the concept of superiority, invite NATO to discuss the issue and do the same;
- eliminate existing disproportions between the opposing forces, reduce the level and turn them into defensive forces;
- "freeze" and then reduce military budgets;
- build a "new" Europe from the Atlantic Ocean to the Ural Mountains.

In brief, in his speeches Gorbachev, contrary to previous Kremlin leaders, implicitly or explicitly acknowledged what NATO has been declaring for years and that is:

- the Warsaw Pact strategy has so far been an offensive one and it must be changed;
- the Soviet Union has a considerable arsenal of chemical weapons;

• the Soviet union has pursued a military policy based on the superiority of forces and this superiority really exists — not a rough equality as stated before — and there are disproportions and differences to be eliminated before achieving a balanced equilibrium;

• a stable and safer peace requires the above equilibrium together with a substantial reduction of offensive forces;

• the generalized armament race is unproductive, if not dangerous, also for the Soviet Union.

Undoubtedly, when Gorbachev spoke to the leaders of the other Warsaw Pact Countries about the new "military doctrine" of "sufficiency", for purely defensive purposes, he put his finger on the historic, politico-military origin of the armament race and declared his intention to eliminate the cause, as so often suggested by NATO. Maybe he has understood that a general war between the two modern empires of East and West is now unfeasable and that it is useless to continue preparing to win it.

GORBACHEV'S FACTS

The new Soviet Union leader's facts have so far been only partially in line with the intentions declared in his speeches.

As already mentioned above, Gorbachev has personally contributed to establishing

really new relations between East and West and reducing the tension and conflicts in various parts of the world by carrying out a perestrojka (reorganization) in foreign policy, accompanied by a certain glasnost (transparency) also as regards the secret matters of the Soviet military apparatus.

Two important fates, in line with his intentions, have impressed the world for their innovative nature and the difference with the policy of the past: the withdrawal of the troops from Afghanistan and the agreement on the INF for the elimination of ground-based theatre missiles.

The reason for the withdrawal from Afghanistan is obvious: that war, which had become guerrilla, could no longer be won, as had already happened for America in Vietnam.

The reason for the agreement on theatre missiles, though representing a substantial change as regards those undersigned by Krushchev and Brezhnev, follows the same purpose: deprive the defence of the West of its nuclear instruments.

According to me, the same reason urges Gorbachev to make pressure on the United States, even through international public opinion, to conclude the agreement regarding the 50% reduction in intercontinental strategic nuclear weapons and to renew the agreement limiting the antiballistic missile defences (ABM), while trying to stop the Reagan initiative for the

development of antimissile space defence arm systems (SDI).

It is undoubtedly a good thing to denuclearize, but if this unbalances the present equilibrium, it may be very dangerous for us and for the peace between East and West.

There are, however, other, less apparent facts, which are in opposition with Gorbachev's disarmament proposals.

Three years after his accession to power, the mighty war production machine and the increase in the quality and quantity of the Soviet military organization have witnessed no slackening. The above, while the United States and other countries of the Atlantic Alliance are planning cuts to military expenditure in spite of the 3% annual increase for the improvement of conventional forces and have deferred the decision concerning the modernization of the theatre and tactical nuclear weapons which will remain after the "Cruise" and the "Pershing" will have been dismantled, even though NATO has already reduced of its own free will the number of warheads in the depots of Europe.

It is enough to mention, as an example, that the Soviet Union continues to build tanks at an annual rhythm of about three times that of NATO, introduce new and sophisticated combat aircraft at a much higher speed than the West and build submarines of 5 different types at a rhythm of almost one per month.

Indeed, under Gorbachev's government we have witnessed a steady annual change of cadre Divisions into operational units. Why is this?

According to optimists it has not yet been possible to change the long term planning of the Soviet Armed Forces and war industry.

Others state that Gorbachev still needs the full support of the high military leadership to carry out his domestic reforms: he cannot thus reduce the financing set down for the Armed Forces.

Another, no less plausible reason, however, is that there is no real intention to subtract resources from the military field for "civilian economy".

Moreover, during the many meetings between United States and Soviet military leaders, when asked to explain the new Warsaw Pact "military doctrine" of "sufficiency" stated in Berlin during the Pact summit, the latter answered evasively. This also emerged during the visit to the Soviet Union of United States Secretary of State for Defence, Carlucci.

Therefore, we must conclude, as General Galvin, Chief Commander of the Allied Forces in Europe, that as regards the military aspect of relations between the two blocs, things have so far not changed at all. Indeed, the situation has become more difficult because, in view of disarmament, it is hard to obtain the approval of governments and the consent of public opinion to expenses necessary to carry out

the so-called "force programmes" even though they are designed to reduce the operational power gap between Warsaw Pact and NATO Armed Forces which is unfortunately becoming wider and wider.

FUTURE PROSPECTS

The above comparison between facts and words shows that future prospects are less optimistic and more uncertain than may appear from the atmosphere of the present relations between the two superpowers and relative alliances.

At present, only three trends seem certain:

- carry on the denuclearization of the European continent;
- increase substantially the economic and commercial relations with the West. There is even talk of a new "Marshall Plan" to help the "poor" Eastern countries overcome the economic crisis which is partly the result of the enormous effort made for the production of war materials to face a war which never broke out;
- further develop the campaign for the reconciliation of the countries of the two blocs, even by appealing directly to the public opinion of the West.

The development of these trends will, obviously, demand new initiatives, more or less propagandistic or concrete, to confirm the "absolute good intentions" of the new Soviet leadership.

In practice, as regards the reduction and balance of conventional forces, the hopes of the West may be greatly deluded.

Moreover, it would be very naïve to believe that the Kremlin leaders and the military in particular, are willing to "lose" much of the "security" given by their present superiority and "undersell" or demilitarize masses of tanks, cannons, aircraft and other combat vehicles, as occurred in the West after the 2nd World War, only to give our people and our leaders more confidence and serenity.

We may thus reasonably advance that negotiations for "conventional stability" (CST) will be very, very long, difficult and exhausting and that each Soviet concession which may weaken their military instrument, will require some political compensation if nothing else; otherwise, we may be granted things deemed useful to slacken the solidarity of the Atlantic Alliance and stop initiatives to modernize its forces and improve its general defences though without increases in quantity, as already happened several times during previous negotiations.

Evidence of the above came recently from Warsaw when Gorbachev proposed the withdrawal of Soviet airborne units if Italy rejected NATO's request and relinquished the idea of accepting on its territory the united States "F-16" group which must leave Spain within the next three years.

It is therefore impossible not to see that Gorbachev is attempting to achieve the same

aims of his predecessors, most probably with the same ruthlessness and shrewdness, though he applies a policy of peaceful and friendly approach which appeals to the public opinion of the West instead of political pressure and military intimidation.

Moreover, as I have already said in a previous article, the Soviet Union cannot change its objective of dominating over Europe and thus breaking NATO apart, for this is the outcome of its historic and geostrategic position.

Gorbachev may change tactics and strategies, but not the objective itself, whereas a chiefly defensive alliance such as ours could gradually disrupt for lack of an immediate threat and danger which the general atmosphere of peaceful relations and the continuation of talks on disarmament will gradually mitigate.

However, the Warsaw Pact may also be negatively affected for the fading away of the image of an important historic enemy such as the West, may rid its military compages, imbued by propaganda with ideologic motivations, of an important element of cohesion.

CONCLUSION

From the above reasoning we may understand how new the challenge for the Atlantic Alliance is because "to guarantee security by disarming" is politically, operationally and technically difficult and psychologically hard on public opinion. We must not forget that in the enthusiasm of peace after the 2nd World War, the West — almost unaware — jeopardized security and peace itself, by hastily demobilizing the forces which had re-conquered and liberated the Countries of Western Europe, sacrificing many human lives and economic resources.

We may therefore advance a new risk which, however, we cannot but accept and face because to overcome it means achieving the final objective of the Atlantic Alliance: i.e. a peace based on a less precarious equilibrium and on more solid foundations.

Therefore, as the Atlantic Cabinet Council declared during the Reykjavik meeting of June '87 and repeated during the State Leaders' summit of March '88, if we wish to guarantee peace and security during the years of negotiations and in the years to come, it is impossible to further reduce the nuclear component of the allied forces in Europe, indeed it will be necessary to modernize it; we must continue to improve the operational capacity of conventional forces and maintain a strong solidarity on the two sides of the Atlantic and within the Alliance.

In view of the above, commitments and financial support may not be reduced and NATO governments have to see that facts follow words.

Italy once again gave a meaningful example which was much appreciated by

SUMMARY OF THE MAIN AGREEMENTS AND INTERNATIONAL TREATIES ON THE CONTROL AND REDUCTION OF ARMAMENTS

- **August, 1963 - Treaty on the limited ban of nuclear tests.** The treaty foresees the ban of nuclear tests in the atmosphere, in space and under-water.

- **July, 1968 - Treaty on nuclear non-proliferation.** Signatory countries: United States, Soviet Union, United Kingdom and another 59 nations. The treaty states that nations with a self-sufficient nuclear armament capacity must not transfer the nuclear armament under the jurisdiction of countries which do not possess it and that the remaining countries must not produce it.

- **October, 1969 - Treaty on sea-bottom armaments.** The treaty, drawn up by USA and USSR, is approved by the United Nations Committee for total disarmament on December, 7th, 1970. it concerns the control of nuclear weapons placed on the sea-bottom.

- **May, 1972 - First treaty on the limitation of strategic arms (SALT 1).** Drawn up between USA and USSR, it foresees:

- a maximum of two deployment areas of defence against antiballistic missiles (ABM);

- a provisional agreement limiting the competition on offensive strategic arms, and thus freezing the number of ballistic missile launchers at the level existing on the date of the treaty.

- **June, 1973 - Nuclear war prevention.** An agreement between USA and USSR which foresees mutual consultations in times of crisis to avoid a nuclear war.

- **June, 1973 - Beginning of talks on the balanced and mutual reduction of forces in central Europe (MBFR).** At first the NATO countries propose to reduce troops to mutual levels of 700,000 men for land forces and 900,000 for joint air and land forces. Talks have continued to our days without reaching any kind of agreement.

- **July, 1974 - Treaty on the limitation of nuclear tests.** USA and USSR agree on limiting underground nuclear tests to 150 Kilotons.

- **November, 1974 - Vladivostock agreement between USA and USSR on the limitation of offensive strategic arms.** It foresees:

- extension of the validity of the provisional agreement of 25.5.1972 (SALT 1) to October, 1977 and validity of the new agreement till 31.12.1985;

- limitation, on both sides, of the following:

- total agreed number of strategic launcher vehicles;

- total agreed number of ICBMs and SLBM, with multiple independent warheads (MIRV);

- possibility of carrying on negotiations on limitations in the period following 1985.

The relative negotiations are held in Geneva in 1975.

- **August, 1975 - Conclusion in Helsinki of the conference on security and co-operation in Europe (CSCE).** Signatories: the Soviet Union, the United States, Canada and another 32 participating European nations. The final document foresees, among things, the notification of the main military manoeuvres involving more than 25,000 men, the participation of observers and other measures apt to develop mutual trust.

- **June, 1979 - Second treaty on the limitation of strategic arms (SALT 11) between USA and USSR.** This foresees the following:

- a ceiling of 2,250 missiles and strategic bombers on both sides; within this ceiling no more than 1,320 strategic bombers and missiles supplied with multiple warheads or cruise missiles. Of these, no more than 1,200 ground based, embarked or air to surface ballistic missiles may have multiple warheads and, of the ground based ICBM, not more than 820 can have multiple warheads;

- the dismantling of 270 Soviet missiles;

- the end of production and deployment of the SS-16 by the USSR;

- the existing enforcement of the ABM 1972 treaty;

- the temporary 3 year limitation on the employment of mobile IBMs and cruise missiles;

- controls on the application of the Treaty via satellite and other national "intelligence" means.

Following the Soviet invasion of Afghanistan (December 1979) SALT 11 is not ratified by the USA, but it is nonetheless applied by both parties.

- **June, 1982 - Start of strategic arms reduction talks (START).** This is an approach towards a 50% reduction of nuclear strategic arms.

- **October, 1983 - Reduction of United States nuclear warheads in Europe.** The USA and the NATO allies unilaterally agree to remove from Europe 1,400 United States nuclear warheads within the next 7 years. these must be added to the 1,000 already removed after the NATO decision of 1979.

- **January, 1984 - Opening of the disarmament conference in Europe (CDE).** Designed to increase the measures regarding the development of mutual trust and safety already agreed upon during the Helsinki CSCE.

- **March, 1985 - Start of new nuclear and space arms talks in Geneva (NST) between USA and USSR.** These are the continuation of START and are designed to establish a control on space arms. The agreement on the elimination of ground based theatre missiles (INF - double zero option) originates from the above talks.

- **September, 1986 - CDE agreement.** The 35 nations of the CDE conference reach an agreement to reduce the risk of war in Europe. It provides for the mutual notification by both NATO and the Warsaw Pact of the main military activities carried out in the respective areas of responsibility. Moreover, it establishes that inspections should be had to verify whether the agreement is applied.

- **May, 1987 - Centres for the reduction of the nuclear risk.** In Geneva, USA and USSR agree to establish Centres, in the respective capitals, with the task of reducing, also through preventive information, the risk of an accidental outbreak of nuclear war.

- **December, 1987 - Treaty for the elimination of all ground based theatre nuclear missiles.** USA and USSR stipulate the treaty for the elimination of their respective ground based theatre nuclear missiles, with a 5,000 to 500 Km range.



Belgian parachute commandos in patrol operations. This kind of unit may be efficaciously employed, especially during the deterrence stage.

allied Countries. With the approval by a large Parliament majority, it accepted NATO's request to let the United States 401 Air Group of F-16 station on its territory: these aircraft are indispensable for the defence of the Southern Region and thus for that of our Country too. It thus avoided a first act of unilateral disarmament which would have been a prejudicial precedent for a correct and profitable development of negotiations for conventional stability in Europe.

Firm and coherent with NATO policy and strategy in supporting and contributing to the demands of mutual defence, Italy has, however, always favoured the dialogue between East and West, convinced as it is that men of goodwill, patience and perseverance may at least try to come close to what history and geostrategy divide and oppose.

However, to achieve and consolidate conventional stability in Europe it will pro-

bably be necessary, in a not too distant future, for the young Italian citizens to devote more time and energy to training, even by periodical calls to arms, for the defence of their land and their homes. We believe that the gradual loss of credibility of the nuclear deterrent, advanced by many, can only be counterbalanced by the will, determination and preparedness of the people of the West to resist all attacks.

We could thus have an inversion of relations between the nuclear and conventional components of forces and the conventional ones could, partly at least, replace the nuclear ones and thus contribute more efficiently to discourage eventual aggressions with a lesser risk of a holocaust.

In answer to the questions raised at the beginning of this article, we may add the following:

- armaments are not the cause of war which is due to the determination of one country to overwhelm another or solve conflicts of interest with violence. Armaments, instead, may substantially contribute to peace, discouraging intimidations and aggressions as the Atlantic Alliance has

been doing for the last forty years;

- disarmament may be convenient only if the balances of strength are improved thus achieving a less precarious relation of mutual security and making peace more certain.

At present, however, we cannot advance a total denuclearization of forces in Europe, because the deterrent effects of conventional forces, as history shows, are insufficient and this is proved by the fact that strongly armed Countries have been attacked by others with inferior forces;

- until a more balanced equilibrium of forces is reached, the Atlantic Alliance must continue to arm to avoid greater risks than the present ones and make the counter-party negotiate reliably;

- only when facts correspond to words also as regards the military policy and the strategic trend of the Armed Forces of the Soviet Union, shall we be able to trust, with caution, the peaceful and friendly intentions expressed by Gorbachev.

Lieutenant General Vittorio Bernard

DISARMAMENT AND SECURITY

GOVERNO DELLE ISOLE
ITALIANE DELL' EGEO



BIGLIETTO A CORSO LEGALE
NELLE ISOLE DEL POSSEDIMENTO
A COPERTURA GARANTITA DEPO
SITATA ALLA BANCA D'ITALIA

LIRE CENTO

PAGABILI A VISTA AL PORTATORE

IL GOVERNATORE

Janini

IL DIRETTORE

Affari Econ. e Fin.

Janini

ITALIAN ECONOMY IN THE INTERNATIONAL OUTLOOK

by Cesare Romiti

LIRE



CENTO

9837 *

LA
LEGGE PUNISCE I FABBRICATORI
E GLI SPACCIATORI DI BIGLIETTI FALSI



Off. Graf. Possedimento Italiano Egeo

The national and the international situation are so tightly connected that it is difficult to consider them separately.

However, Italy presents some particular problems on which its possibilities of maintaining the positions achieved among industrialized countries depend.

1987 confirmed the strength of our economic system.

According to official figures, the gross national product increased by 3.1% in real terms.

This figure followed that of 2.9% of the previous year and was among the highest of those of industrialized countries.

Investments carried on this positive cycle with an increase of 8.2%.

For the first time the industrial production index overcame the 1980 levels.

In the first six months of 1988 data resulting from sample surveys were positive.

In particular, by the end of March, the data regarding the consumption of electricity showed a further development of productive activities.

At the same time a further increase in industrial production was registered (6.2% in March, 1988, after 8.7% in February and 7.3% in January).

Pessimistic anticipations advanced at the beginning of last year were thus disproved.

Real economy seems to have absorbed without relevant damages the effects of that black Monday of 19 October, 1987, to which people ascribed catastrophic consequences.

It is however necessary to complete this positive picture with further considerations less favourable to optimism.

A first aspect — not very reassuring, so as to say — is the fact that the above trend of our economy is chiefly connected to the home demand.

In fact, in 1987, final home consumption increased at a rate of 4.1%, that is well above the increase of the national product.

This means that an important part

of the demand was satisfied by the import increase.

Actually, in 1987 the balance of trade closed with a debit balance of 950 billion lire.

Many, if one considers the debits of the early '80s.

Few, if one takes into account the balance of the previous year, which was over 3600 billion lire.

We are thus moving towards an economy unbalanced towards the inside in which imports increase more than exports. This trend is confirmed by data regarding the balance of trade of the first six months of 1988.

Moreover, we are not reassured by the fact that certain bearing branches of our economy, such as the textile one, are worsening their balances with abroad.

We thus have a problem of global competitiveness which must not be undervalued, despite cases of brilliant performances by some leading enterprises.

A second reason for concern is that of public revenue.

As we all know, this problem is not new and I shall therefore not go into detail.

However, I would like to mention some figures.

By the end of '87, deficiency in the public revenue amounted to 113,500 billion lire, of which 80,000 billion lire refer to interests, in relation to a National Debt around one million billion lire.

These figures place us in a pre-eminent though not too enviable position among developed countries and have heavy consequences on the outlook of our economy.

The need for financing the deficiency in the public revenue, in fact, keeps the rate of actual interests at the highest levels, Spain excluded.

This is an objective stop to the possibilities of investment, especially for all those enterprises which need to turn to credit.

The payment of interests is, in fact, a re-distribution of income

For the Europe of 1992 having eleven different currencies is a sign of weakness in the face of the rest of the world.



towards domestic consumption and, therefore, inclines to increase the unbalance between production and domestic demand.

Lastly, the volume of the debt and the automaticity of the mechanisms which nourish it, make it impossible to use the National Balance as an economic incentive, limiting the spaces of manageability of the economy.

Apart, however, from all other considerations, we must bear in mind that we are inevitably going towards a regime of international liberalization of capital movements.

In the present situation, this may mean higher rates of interest, a more restrictive economic policy, a heavier fiscal pressure.

All this does not favour the development of economy nor does it increase our capacity to compete on the international field.

The third element of concern is inflation. It may seem strange to talk about it at a time when we are drawing the final balance of that backward trend which, in a few years, brought inflation from 21 to about 5%.

However, this 5% seems to be impassable; and 5% is, unfortunately, above the levels reached by most of the other industrialized countries.

The causes of this are different and not all easily identifiable.

It is certain, however, that an average increase in retributions of

8.9% — I quote official data — can in no way be considered a blocking factor for the cost dynamics of our economy.

What are the conclusions to be drawn from this complex picture with alternate and contrasting elements?

That at present our economy has sufficient impetus to reach strong positions within the international context, but that, at the same time, there are certain factors which may considerably reduce this impetus at the first sign of a weakening of business.

It is everyone's responsibility to remove these factors. Firstly, the enterprises which certainly cannot stop at the results reached and slacken their commitment in productivity and in innovation; but most of all of those responsible for the economic policy which should be more strongly directed towards modifying the mechanisms of expenditure in the public sector and strengthening the economic freedoms of our system.

Perhaps, the functioning methods of the institutions do not allow to intervene with the necessary determination and it is for this reason too that on many parts the need for institutional reforms is being considered.

What I believe should be underlined, however, is what has to be faced in the international field.

The above is dominated by uncertainties and tensions and no matter how things will turn out, competition will be harder and harder.

Let us now consider the main actors of this scenario.

The United States, though showing many signs of recovery, especially in the last period, is in a situation having many critical elements.

The dwindling of the dollar exchange rate has permitted considerable recoveries in foreign accounts and has given an extraordinary impulse to the exports of this country.

All this, however, is not enough to bring the settlement of the balance of payments in a position of security.



CORONE 100 — Dimensioni: cm. 16,5x10,8 — Timbratura: 1920

Above all it does not affect the positions of the United States as regards the South East Asian competitors, who denominate their exports in dollars.

It must be mentioned, moreover, that the American Administration has to face a public deficit of about 160 billion dollars and a foreign debit of over 350 billion dollars.

We may therefore foresee that, following the recent elections, severe fiscal and financial provisions will be taken to solve the problem of the home and foreign deficit.

Security is for the most part a problem of relations of strength, military as well, but it also has to be pursued through a diplomatic job of mediation and the support of development.

This may also mean a slackening of the home demand of the United States and an increase of its pressure towards exports; that is a slowing-down of world trade, of which the United States represents a consistent part, and a stronger competitive attack of the United States against the rest of the world.

Japan, moreover, is proving that the concern for the revaluation of the yen, was probably excessive.

In fact, the home demand responded better than expected and is increasing at a rate superior to 5% and, moreover, the fear of losing competitiveness as regards foreign countries, has driven the industry to new interventions of efficiency and rationalization.

It would therefore be better not to count on a crisis in Japan.

On the contrary, we may expect to see it stronger than today and more aggressive in its competitiveness with the rest of the world.

Especially towards Europe which, at present, is certainly more vulnerable than the United States, as far as foreign competition is concerned.

We may thus expect that Europe, and Italy with it, will find itself under the cross fire of the commercial attack by the two parts of the world.

An attack which, surely, we will be unable to avoid completely by raising protective barriers and for which we shall have to get ready by gaining as far as possible positions of force.

In view of the above, I believe that the strengthening of the communitarian unity becomes of the utmost importance.

There is of course the term of 1992: we are all engaged in respecting this date, but a European market without national barriers is not all. We believe that it is necessary to integrate the unity of the market with the unity of the currency because eleven different currencies would mean an additional cost that other economic powers do not have; it costs in terms of exchange risks, it costs in terms of bureaucratic procedures and the fact of having eleven different currencies is a sign of weakness in the face of the rest of the world.

No matter how strong the German Mark is, it will never be a sufficient alternative to the yen and the dollar which rest on vaster and stronger homogenous economic systems.

It is therefore necessary to make the ECU grow and become a currency of domestic exchange and a reserve currency.

The excellent performance reached so far is a suitable guarantee for this basic step, however, Europe no matter how great and united, is not an island in the world.

All considered, the economy of our continent costs almost as much as that of the United States — about 3,500 billion dollars against 4,200 —



and more than that of Japan (about 2,000 billions).

It is no small thing, but a division into three of the world economic power is only a situation of unsteady balance, unless we reach agreements establishing mutual rules of behaviour.

Once the United States was the dominant power.

This gave us — or imposed upon us — institutions such as the World Bank and the Bretton Woods system which worked brilliantly until the United States was able to support

their leadership.

Today, similar instruments, regulating exchanges and guaranteeing the freedom of trade, must be found and managed together, in the interest of everyone. Not only of industrialized countries, but also of the backward parts of the world for which industrialized countries are responsible as regards development and security.

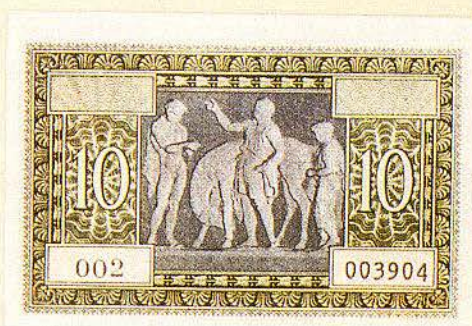
I have just mentioned security and I would like to go further into the subject which is one of particular interest.

I am convinced that security is for the most part a problem of relations of strength, military as well, but I am even more convinced that it is possible to pursue security through a diplomatic job of mediation and the support of development.

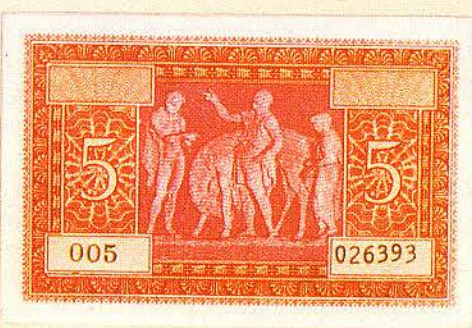
As regards economy, politics and international security Italy will have to play an important role which will certainly not be one of supremacy, but a strategic role in a Europe which we are all engaged in making more united.



DRACME 50 - Dimensioni: cm 10,5x6,5 - Emissione: 1940



DRACME 10 - Dimensioni: cm 8x5,1 - Emissione: 1940



DRACME 5 - Dimensioni: cm 8x5,1 - Emissione: 1940



DRACME 1 - Dimensioni: cm 8x5,1 - Emissione: 1940



YUAN 5 - Dimensioni: cm 14,5x7,6 - Emissione: 1921



YUAN 1 - Dimensioni: cm 13,3x7 - Emissione: 1921



LIRE 5 - Dimensioni: cm 8,4x5,5 - Emissione: 1944



LIRE 2 - Dimensioni: cm 7,4x5 - Emissione: 1944



LIRE 1 - Dimensioni: cm 6,5x4,5 - Emissione: 1944



CENT. 50 - Dimensioni: cm 5,5x3,8 - Emissione: 1944

In this respect, as members of the European Community and of the Atlantic Alliance at the centre of the Mediterranean, we have particular responsibilities.

The responsibility of activating whenever possible, the flow of technology; Italian industry is strongly engaged in this respect.

The responsibility of maintaining complicated and difficult international political balances in the respect of alliances and national interests; on the whole, I deem that our foreign policy adequately accomplishes this role.

Lastly, the responsibility of guaranteeing, militarily speaking, the security of the central Mediterranean; and I believe that, here too,

we are giving an important contribution.

All these responsibilities are increased by the current détente between the two superpowers and the Soviet Union's policy of opening towards Western models.

Therefore, Italy will have to play an important role as regards economy, politics and international security.

This role will most certainly not

I would rather see Italy, once defined the «aircraft carrier of the Mediterranean» as «a bridge». A bridge filling the gap between the Mediterranean and Central Europe.

be one of supremacy, and it would be totally illusory to think it, but a strategic role in a Europe which we are all engaged in making more united.

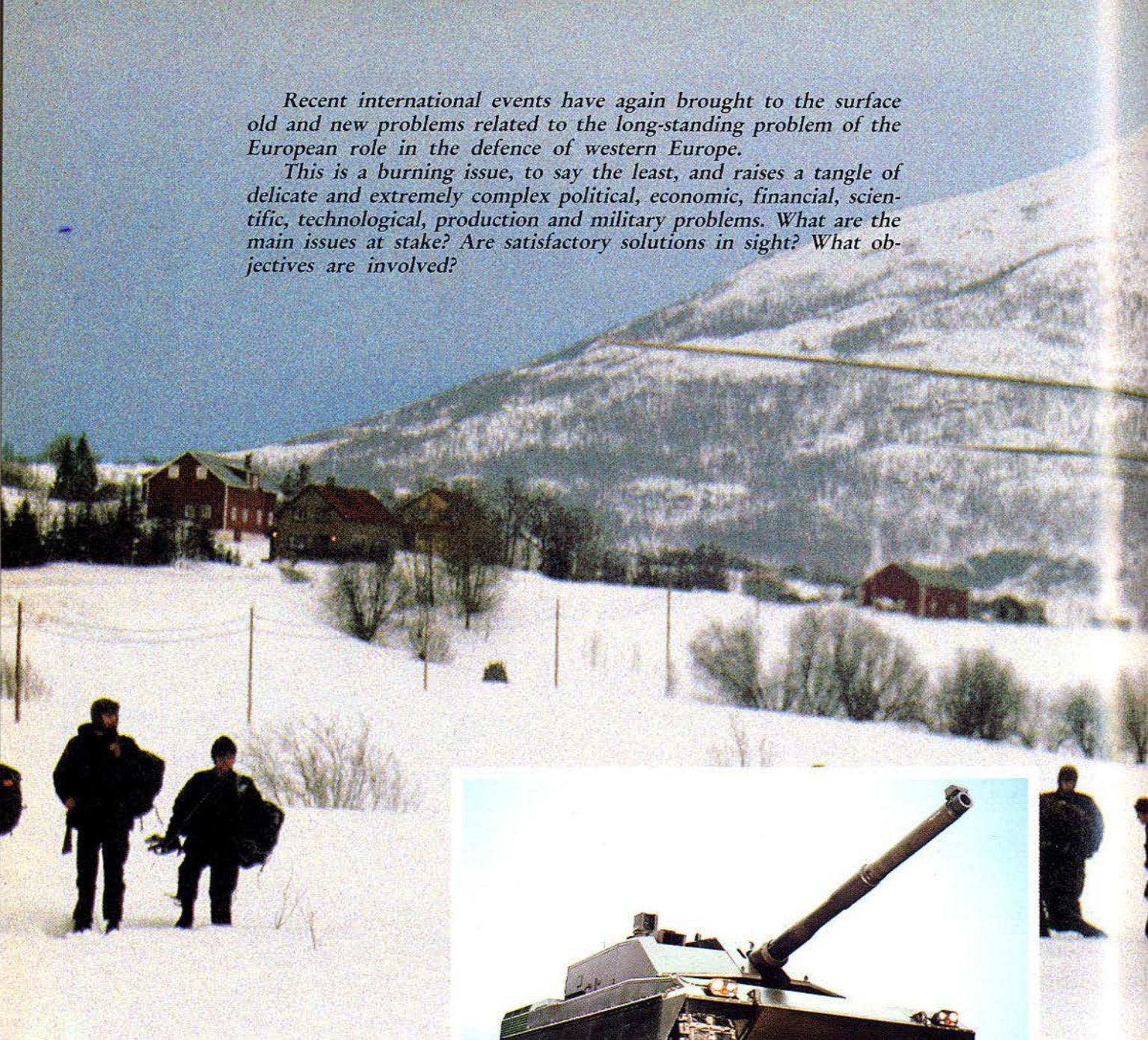
I remember that when Italy cherished unseemly dreams of greatness, people used to say that our peninsula was the «aircraft carrier of the Mediterranean». I would rather see it as a bridge. A bridge filling the gap between the Mediterranean and Central Europe.

A bridge where, through the will and the engagement of everyone, welfare and peaceful cohabitation may walk over.

If this dream came true, we could add yet another deed of real greatness to our age old history.

Recent international events have again brought to the surface old and new problems related to the long-standing problem of the European role in the defence of western Europe.

This is a burning issue, to say the least, and raises a tangle of delicate and extremely complex political, economic, financial, scientific, technological, production and military problems. What are the main issues at stake? Are satisfactory solutions in sight? What objectives are involved?





THE DEFENCE OF EUROPE AND EUROPEAN DEFENCE



Before attempting to provide an answer to the above questions, a brief outline must be made of the strategic situation in Europe which forms a background to them.

The situation in question is essentially intercontinental and, in certain aspects, even planetary, in nature. Europe is the continent on which the Western bloc and the Eastern bloc face each other off materially. It is thus the main knife-edge of the equilibrium entrusted, not only to the forces deployed in it, i.e. the NATO and Warsaw Pact military systems, but also to forces that, if the need arises, can be ferried in from other theatres.

Clearly, then, European equilibrium is the result of **internal** factors, such as the structure of the opposing forces, their levels of efficiency, weaponry and equipment, etc., and of **external** factors. The latter include the strategic mobility of the reinforcements that can be sent by the two blocs either through the Atlantic and Mediterranean, on the one hand, or through the air-ground spaces of European Russia and Eastern Europe, on the other. Or it may be the result of the greater or lesser capacity shown by the two parties to hinder the movements of the other.

This brings into play the capabilities and the possible action of the two super-powers, United States and Soviet Union, the only ones capable of operating over intercontinental distances. Also linked to the approaches and behaviour of the two super-powers is another planetary fact which outweighs all the international politico-military equilibria, beginning with European equilibrium itself: the mutual nuclear **deterrence** exerted by the huge strategic arsenals of the two countries.

It is against this background that the **European** defensive systems of NATO and the Warsaw Pact face



each other off. Let us examine some of the main features of both.

The NATO system is characterized by a clear-cut predominance of air-ground forces in the central sector and by air-naval forces in the flanking sectors (especially in the South, with the presence of the US 6th Fleet and large air-naval forces of other countries). The Warsaw Pact system is mainly air and ground based, even though, particularly on the northern flank, it can rely on fairly strong aeronaval forces.

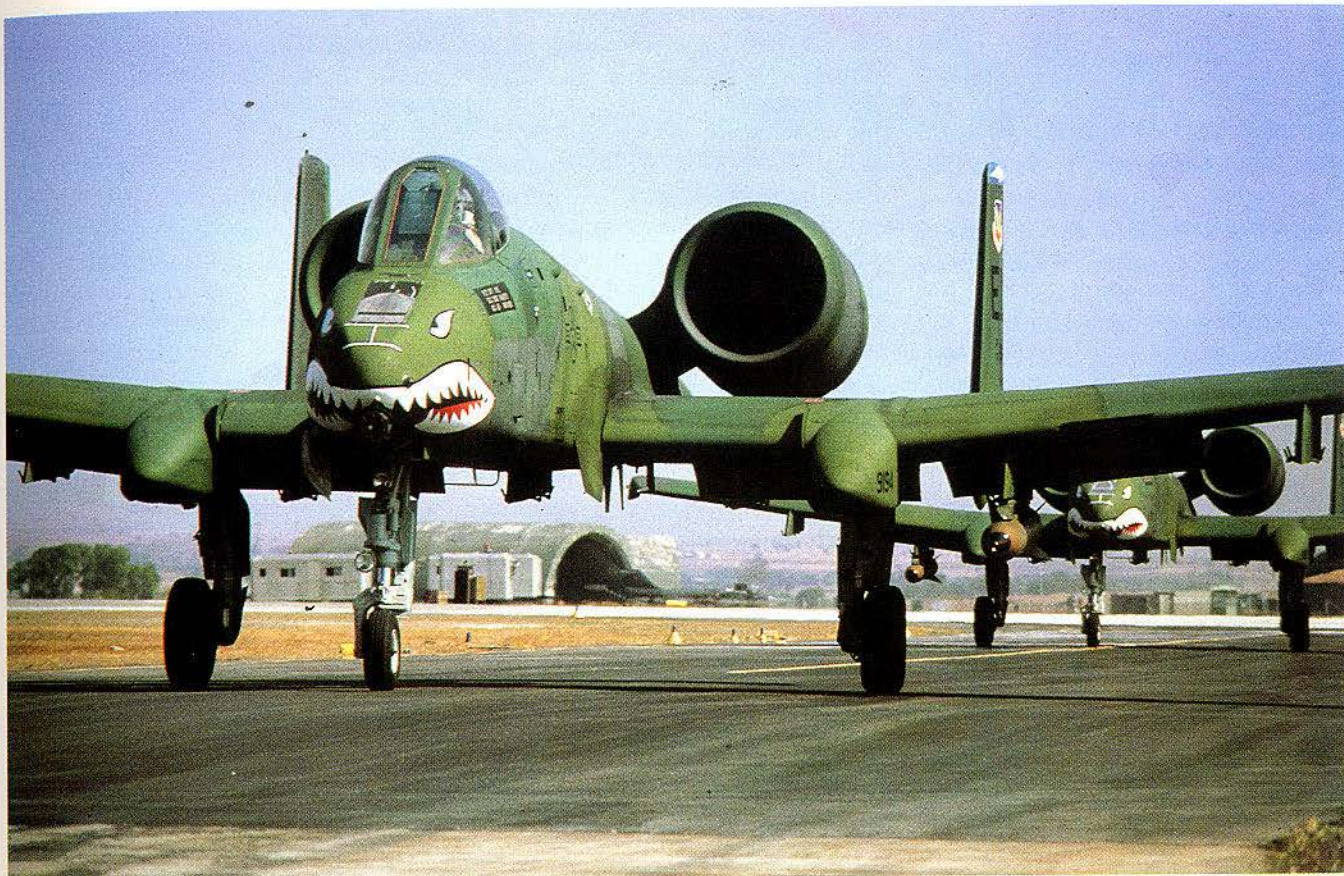
Technically speaking, the NATO air-ground forces are mainly defensive in nature, with strong offensive-defensive capabilities in the aeronaval field. The Warsaw Pact forces instead have strong offensive capabilities in the air-ground forces, accompanied by strong air-naval offensive-defensive capabilities, but with serious deficiencies of a technical nature (no air cover for units operating at long ranges) and of a geo-strategic nature (the four

A Canadian M109 self-propelled gun in a German village. Although small in peacetime, the Canadian contribution to European defence in time of war could become substantial.

Fleets — North Sea, Baltic, Black Sea and Pacific — into which the Soviet navy is divided cannot give each other mutual support. Moreover, the passages through which Soviet vessels must pass to reach the open sea are to some extent all 'controlled' by western forces).

The **NATO defence system** is based on a high degree of coordination of all its air-ground and air-naval components.

In the **air-ground** field, above all in the central sector (where the best equipped forces operate), this system has been given a structure suitable for mobile defence carried out by powerful armoured and motorized units backed up by efficient tactical air forces. The cornerstone of the whole system is "ground-air"



Two A-10s of the 23rd TFW in arrival from the United States, photographed at a Turkish base during a NATO exercise.

cooperation in which, together with the armoured and anti-tank units, etc., a fundamental role is played by the weapons systems, i.e. conventional artillery, tactical missiles, close air support, interdiction aircraft, etc., capable of hitting not only front echelon forces but also those of the second echelon, in order to prevent them from supporting the attack, exploiting any breakthrough or blocking any NATO counterattacks (1).

An essential prerequisite for this type of mechanism to function is to gain air superiority over the whole battlefield and rear echelons. On this assumption the NATO countries have placed the emphasis on two main types of aircraft — 'dual-role' fighters, suitable for both air battles and ground attack, and AWACS (*Airborne Warning and Control System*), designed to provide air operations control. Western

superiority in electronics. Technology is thus used to offset Soviet numerical superiority in fighter aircraft.

This first mechanism is linked to two others, which may be either parallel or alternative: **flexible** or **gradual response**, and that of control and use of the air and sea spaces through which appropriate reinforcements would be sent whenever the need arose. These topics are discussed in greater detail below. Attention will now be focused on the opposing Warsaw Pact mechanism.

As outlined above, the technical characteristics of the Warsaw Pact **system** are more offensive in nature. Despite the technological and organizational improvements introduced over the decades, it is still basically the same system with which the Red Army carried out its final offensives against the Third Reich at the end of World War II. The forces of its allies were officially incorporated in it in the mid fifties (2).

The present operational mechanism, which clearly reflects these origins, is based on the traditional strong points of the Soviet military apparatus (which have been transferred, with all that this implies, to the military apparatuses of the allied countries): armoured and mechanized units, artillery and tactical air force (of course, these have been updated by the introduction of new weapons systems, such as tactical missiles and attack helicopters). The scheme used is the typical one of coordination between fire and movement, sometimes accompanied by the use of special forces *Spetsnaz* and with the in-depth support of longer range weapons systems (interdiction missiles and aircraft). Air cover is provided by a large fighter air force and a powerful anti-aircraft defence system (although technically defensive, the latter weapons can have an indirect offensive function because the effectiveness of their protection largely determines the effectiveness of the attacks carried out



by the armoured and mechanized units with the support of aircraft and helicopters).

At even greater ranges, e.g. continental, transcontinental and oceanic, this mechanism can rely on support from a large number of bombers, most of which are old and even obsolete, as well as on powerful naval forces, the main task of which appears to be to 'isolate' the European theatre so as to prevent NATO from bringing in the necessary reinforcements.

In broad outline this is the scheme of the opposing forces centred around Europe. It is against this background that an evaluation will now be made of the contributions to the common defence made by the United States and by the other members of the Atlantic Alliance.

For the sake of simplicity, the passing of the years may be said to

have been accompanied by the consolidation of an actual 'structuring' of the contributions made by the various countries. On the whole, this 'structuring' which is determined by differences in the financial, scientific, technological and productive resources of the countries concerned, has occurred in two closely interrelated and mostly overlapping sectors, one defined in terms of arms/equipment categories and the other in terms of types of forces.

In very broad outline and without using percentage figures of dubious reliability, it is possible to work out a scheme for indicating the 'autonomous' capacities of development-production of NATO members (including those who are not members of its military organization) in several fundamental sectors (Tab. 1).

As we have already pointed out, this scheme indicates the capacity of the various countries to develop (i.e. to define conceptually, design, test, develop and produce) autonomous-

ly, whether alone or in cooperation, a number of fundamental types of weapons and equipment. It excludes other capabilities, such as that of making, often very significant, contributions to the development of special technologies (for instance, the Dutch contribution in electronics) or that of designing and producing light weapons (in practice, possessed by all the NATO countries, although not always at the same level). Also excluded is the capability of participating in the production under licence of high — very high tech systems (e.g. in aircraft production, with the participation of various European countries, in the first instance, Belgium and

Aircraft Carrier Battle Groups (CVBG) each consisting of an aircraft carrier and escort vessels, are used by the US Navy to control the air-sea spaces. In the West, only the United States can now build and maintain large aircraft carriers like the John F. Kennedy (CV 67) photographed here as it proceeds at full speed.



TAB.1

C3I Systems (Command, Control, Communications) suitable for planetary range operations:	United States of America
Intercontinental strategic weapons (bombers, ballistic missiles, submarines armed with ballistic missiles)	United States of America
Intermediate-range strategic weapons (bombers, ballistic and cruise missiles, submarines):	United States of America, France, UK (only submarines and nuclear warheads of on-board ballistic missiles)
Interdiction-attack aircraft:	United States, France, West Germany-UK-Italy (in collaboration).
Fighter aircraft (interception and air superiority):	United States of America, France, Germany-UK-Italy-Spain (in collaboration)
Early warning aircraft:	United States of America
Tactical nuclear warheads:	United States of America, France, UK
Tactical nuclear missiles:	United States of America, France.
Ground artillery:	United States of America, West Germany, UK, Italy, Netherlands, Spain
Tanks:	United States of America, France, West Germany, UK, Italy.
Large aircraft carriers for CTOL (Conventional Take-Off and Landing) aircraft:	United States of America
Medium aircraft carriers for CTOL aircraft:	United States of America, France
Small aircraft carriers for V/STOL (Vertical/Short Take-Off and Landing), STOVL (Short Take-Off Vertical Landing) aircraft and helicopters:	UK, Italy, Spain
Very high-tech escort cruisers:	United States of America
High-tech naval escort units (destroyers and frigates):	United States of America, Canada, West Germany, UK, Italy, Netherlands, Spain
Nuclear propulsion attack submarines:	United States of America, France, UK
Conventionally propelled submarines:	United States of America, France, West Germany, UK, Italy, Netherlands, Spain
Naval weapons systems (artillery, missiles, point defence systems, torpedoes, etc.):	United States of America, France, UK, Italy.

Holland, in the production, updating and maintenance of US F-16 fighter-bombers deployed in the various NATO air forces; or again, as still happens in the same field, with the participation of Canadian industry in several important programmes).

This scheme also reveals the completely predominant position of the United States, the only country capable of developing and producing all kinds of weapons alone. It must be pointed out that the United States have been included among the constructors of medium sized aircraft carriers and conventional submarines even though they have built none of either for a number of years, because they have retained their capacity for setting up and carrying out this type of construction (3). On the other hand, they have not been included among the constructors of V/STOL and STOVL aircraft carriers because, although they have the necessary know-how to design and build such vessels (4) they have given up the idea of doing so, at least for the time being.

Also France, although on a much smaller scale than the United States, has the capability of designing and producing a wide range of weapons, both conventional and nuclear. Other NATO countries have the know-how and technology needed to produce them but have decided not to, above all for political reasons.

The essential specific features of the NATO forces' structure (including the member countries which are not part of the military organization) are set out in Table 2.

Here the situation is practically the same as for weapons: clear-cut predominance, or even monopoly, of the United States of forces equipped with the more sophisticated and costly systems, comparative equilibrium in tactical naval forces, in naval forces suitable for supporting roles and in ground forces (often with a considerable lack of uniformity in both equipment and training). Furthermore, the United States, in addition to their forces



normally deployed in Europe, also have large forces based in the homeland (part of which allocated to the European theatre in time of crisis) as well as large well-equipped and trained **reserve forces**.

The distribution of tasks among the United States and the other NATO members follows more or less the same pattern. Once again the dominant and decisive role is played by the United States at both the strategic nuclear and the conventional-tactical nuclear levels. The **flexible** or **gradual response** on which the entire NATO defensive strategy hinge is based, despite the ambiguities related to the uncertainties and difficulties involved in establishing the so-called **nuclear threshold**, on the capacity, which is possessed to the required degree only by the US forces, to retaliate with constantly increasing violence and effectiveness over the entire range from a shot fired by the infantryman to the launching of intercontinental ballistic missiles.

For the purposes of European defence, the US forces perform (in peacetime) or are designed to perform (in case of war) the following functions:

- **planetary monitoring**, by means of a wide range of sensors (optical, electronic, space-launched, etc.), of the activities of the potential enemy; despite recent programmes backed mainly by France ('Helios' observation/reconnaissance satellites, etc.), and despite the acquisition by NATO of eighteen AWACS normally based in Europe, European potential in this field in no way matches that of the United States;
- exercising of nuclear **deterrence** at all levels; also in this field, European potential is much more limited than that of the United States, i.e. the deployment for NATO purposes of the 'national' nuclear forces of France and the UK is, to say the

least, somewhat uncertain, or at least much more uncertain than that of the US forces;

- participation in the establishment of **air superiority** over the land battlefields and rear echelons; in this field, the European contribution is more important and capable of being boosted; nevertheless, without US support, it would never be capable of withstanding the overwhelming Warsaw Pact forces (in case of war, the conquest of superiority in the air would be essential for NATO: without it, no ground defence, mobile or not, would be possible);

- control over Mediterranean air-sea spaces, of vital import in allowing the US air, sea and land-borne

reinforcements to be ferried in; this is achieved by the CVBG (*Aircraft Carrier Battle Group(s)*) of the US navy; the European contribution to the establishment of this control may be important, despite the lack of homogeneity of the complex formed by the European NATO navies, but it would not even be conceivable without the fundamental support of the US CVBGs;

- the contribution made by the carrier aircraft to air-ground operations, with possible nuclear deterrent support from the cruise missiles carried by surface vessels and submarines; a small contribution of the first type could be provided by aircraft from the French aircraft carriers and by the V/STOL-STOVL

TAB. 2

Strategic nuclear forces capable of inter-continental/planetary range operation:	United States of America
Strategic nuclear forces capable of intermediate range operation:	United States of America, France, UK.
Tactical nuclear forces:	United States of America, France, UK
Long-range strategic bombers (suitable also for conveying conventional weapons):	United States of America
Air forces for interdiction/attack/close air support:	United States of America. To varying extents, all the other Allied air forces.
Air forces for interception/air superiority:	United States of America. To varying extents, all the other Allied air forces.
Aeronaval forces (aircraft carrier groups) for control of oceans and projection of force beyond dry land:	United States of America.
Aeronaval forces capable of carrying out (by means of suitable task forces) limited operations to establish control over the seas:	United States of America, France, West Germany (according to specific conditions, using limited naval forces with heavy backup from land-based aircraft), UK, Italy, Netherlands, Spain.
Naval forces suitable for merchant shipping protection:	United States of America. To a greater or lesser extent, all the Allied navies.
Ground forces:	United States of America. To a greater or lesser extent all the other Allied armies.



Leopard 2, forerunner of the second generation European tanks, is designed to withstand the first impact of enemy armour.

of the carriers of the other European navies;

- contribution to direct protection of the Atlantic routes; also in this case, the European contribution would not be negligible;

- contribution by large and well-equipped forces to ground defence (in particular, in the central sector, where it is planned to deploy the 7th US Army stationed in Germany).

On the other side of the coin, the following potential can be attributed to the **European forces**:

- capacity of carrying out effective defence (mobile or not), in cooperation with the US forces, partly with well-equipped air-ground units (in particular, as we have seen, in the central sector);

- capacity to carry out an important role in both the fight to establish and maintain air superiority and in tactical ground attack

operations;

- suitability for making a valid contribution to both control of the seas and the protection of the Atlantic and Mediterranean sea routes.

Whether we like it or not it is clear that, within the framework of common defence, the role of the Western European countries is obviously, if not subordinate to that of the US forces, at least autonomous to a very low degree. This is true also for the forces of those countries that are not NATO members, or participate in the military organization of NATO from the 'outside'. This is the heart of the matter: is it possible to enhance this role? If so, how and at what price?

For obvious reasons, it is possible here only to point, very cautiously, to hypothetical, rather than to actual, solutions. Before doing this, however, several essential points must be clarified.

To begin with, it would be unrealistic to imagine that a consolidated 'structural' situation can be changed in the short medium term.

Within certain limits, this would be possible only if, within a reasonable period of time, a suitable agreement was reached to eliminate or significantly reduce the asymmetries which, precisely in Europe, characterized the relationship between the opposing blocs. This hypothesis, although desirable, must be viewed with caution in view of the objective difficulties standing in the way of its implementation (beginning with the problem of defining the 'parameters' most suitable for 'measuring' reductions to be made in widely differing weapons systems).

In this article, only the 'institutional' aspects of the question can be examined. Suffice it to say that all the terms of the problem would have to be reappraised if some form of federal or confederative European union having effective powers in foreign and defence policy were to be implemented.

By limiting the survey to the technical aspects of the problem the issues can be considered from three fundamental, closely interrelated,



points of view: military (definition of the needs and rational utilization of resources), financial (allocation of resources and incidence on government budgets) and industrial (research, experimentation and production).

In this article it is obviously possible to deal with these issues only in broad outline. It may be advisable to consider each "weapons-force" sector from the above mentioned three points of view, beginning from the more ambitious approaches, i.e. from those of the nuclear strategic type.

As is known these approaches involve only two countries, France and the UK. The former, which currently possesses a classic 'triad' (bombers-land-based ballistic missiles-nuclear submarines armed with ballistic missiles), plans, starting from the mid 'nineties, to renew the two missile components of the triad, at the same time dropping the piloted aircraft component. The latter, which has a deterrent comprising a submarine launched missile system, plans to replace the four outdated vessels currently in service with the same number of units of greater displacement armed with the US *Trident 2* (DS) system, still at the experimental stage.

Both programmes are particularly ambitious, in particular because they involve the commissioning of very long range missiles (the design range of the *M5* with which future French submarines are to be equipped, has not been officially announced. However, it will undergo an "augmentation significative" with respect to the *M4* which is currently being used to replace the older *M20s* on five of the six vessels now in commission. Before the U.S. Navy decided to implement a partial 'disinformation' approach with regard to its latest systems, the *Trident 2* was indicated as having a range of 10-10,000 kilometers. Fur-

thermore, the costs of these systems were high and the organizational and operational problems involved difficult to solve. For instance, the 'management' of the *Trident* missiles mounted on the British submarines will be carried out at the US base of King's Bay in Georgia. Apart from the strategic advantages that they may provide (i.e. the possibility of using intercontinental missiles would allow submarines, for instance, to exploit very large patrol areas, thus making it very difficult to locate them; however, more resources would perhaps have to be devoted to their protection) these programmes have one great risk: they represent a heavy drain on financial resources, which must be taken away from other programmes, as well as requiring an extremely costly industrial effort, with possible negative effects on the reinforcement and modernization of the conventional-tactical nuclear forces of the two countries.

As far as cooperation is concerned, the situation is anything but brilliant regarding conventional European programmes. It must be acknowledged that the problems of standardization and interoperability which have plagued NATO for many years have certainly found no solution (despite the partial consolation that, albeit in different fields, the Warsaw Pact countries have the same problems).

Suffice it to examine a few examples. Today, two different types of fighter are being developed, virtually in competition with each other — the Anglo-German-Italian-Spanish *EFA* (*European Fighter Aircraft*) and the French *ACT/ACM* (*Avion de Combat Tactique/Avion de Combat Marine*), both characterized by high-tech solutions and (the reverse of the coin) by high costs. It would be in the interest of European industry that both programmes be completed and that the huge stock of know-how and experience gained by implementing them not be wasted. However, at the financial level, it should be realized that

the burden due to the failure to coordinate such vital programmes can have negative results with vast repercussions, without mentioning the operational complications that may arise.

In the meantime, national, bilateral, trilateral, etc. programmes to develop new attack helicopters, new tanks, new vehicle-drawn or self-propelled artillery pieces, new multiple rocket launchers, and so on, overlap and intersect haphazardly. At the naval level, each country uses its own capital ships — aircraft and helicopter carriers, etc. — according to its own organizational and operational requirements, often paying little heed to the small number of existing common programmes, such as the *NFR 90* (NATO *Frigate 90*), which limp on, fraught with many difficulties.

The key point is the following: if there is to be a European contribution to European defence which is truly commensurate with the political and economic importance of the European members of NATO, it is necessary to implement a common weapons policy which will ensure, on the one hand, that costs are maintained within acceptable limits and, on the other, that the technology, tactics and operational procedures of the various countries can be harmonized at a much higher level than the present one.

In theory, the best path to follow in order to achieve a common arms policy would be to impose a **unitary strategy** upstream from this policy (of course, in line with NATO strategy, which remains the cornerstone of European defence, although implemented in such a way as to allow the different national strategies of the European members of the Alliance to be merged), thus giving rise to equally unitary technological, organizational and operational approaches. In practice, however, this does not seem to be feasible. It is at least debatable that a Europe lacking any true political dimension can implement such an



French demonstration aircraft Rafale, on which the ACT/ACM (Avion de Combat Tactique/Avion de Combat Marine) to be issued to the French air force will be based.

organic strategic approach.

It thus becomes necessary to proceed step by step, even when confronted by events which would otherwise require the pace to be stepped up (on-going or potential events of this kind include also the scheduled introduction in 1992 of the Single European Market, which will necessarily have an effect on the public spending and industrial structures of the EEC member countries, almost all members of NATO, with regard to the allocation and utilization of resources for defence purposes).

In the present conditions and those of the foreseeable future, the step-by-step approach means laying the bases for a closer and more effective cooperation, particularly in the technical field, which can later

be expanded if necessary in order to achieve further, more extensive developments.

In order to take the first steps, even in the absence of any unitary political 'guidance', there is nothing to stop the General Staffs of the NATO member countries from setting up international interforce study groups to analyse the strategic prospects available to the Old Continent. If necessary, the most likely alternative scenarios (nuclear environment, conventional-nuclear environment, denuclearization of certain areas, arms reduction, total or partial elimination of present asymmetries, etc.) could be taken into account, together with their financial and production implications. At the juridical level, the establishment of groups of this kind should be possible even by means of simple technical agreements, for which the parliamentary ratification required for international agreements by the Constitutions of the countries con-

cerned may not even be necessary.

If carried out with scientific rigour, this kind of analysis could provide precious data of use in identifying and determining the requirements to be satisfied for the various hypothetical scenarios. At the same time, greater impulse could be given to on-going collaboration between the various National Arms Directories of the main producer countries.

In the meantime, another complementary approach could be attempted, i.e. the temporary seconding of staff officers to operational units from other countries (e.g. Italians to French or German units, etc., French officers to Belgian or Dutch units, etc., Portuguese to British or Italian units, etc., Germans to Norwegian or Turkish units, etc., Spaniards to Danish or Greek units, etc. and so on). This latter solution would probably be technically more suitable for getting to know each other better and for



carrying out useful exchanges of experience than the formation of mixed units comprising two or more nationalities. The latter solution raises complex problems of organization, command and the prompt transmission of orders which are difficult to solve. By serving for a sufficiently long period in units belonging to other countries, intelligent and competent officers would gain the capacity to make a correct assessment of environmental and operational situations different from those upon which their basic training was based. What is even more important, as regards the choice of material, they would be able to gain deeper insight into the problems related to the definition of common requirements with a view to satisfying very different needs.

This brings us back to the problems of standardization and interoperability, the solution of which forms the indispensable basis of all wide-ranging strategic, operational and logistic approaches. This is because only by achieving positive, albeit partial, results in the development, production and distribution of common weapons and equipment will it be possible for Europe to make a more effective contribution to its own defence, at the same time keeping costs down.

Here we must be realistic. The defence of Europe, at least within the framework of East-West confrontation, cannot, still for many years to come, be conceived of outside the NATO (whether or not the country concerned is a member of its military organization). Therefore, it cannot be conceived of outside the strategic, operational and productive schemes outlined in the present article. To imagine that Europe can start building intercontinental bombers or super-aircraft carriers in order to acquire total defence capability without the contribution of the United States would be pure



folly. On the other hand, the defence of the Old Continent has represented, and will continue to represent, a vital and undeferrable necessity for the United States themselves. The problem is rather to strike a better balance between the needs and contributions of the two partners, without losing sight, while doing so, of the opportunities for arms reduction offered by the new atmosphere reigning between the two blocs for the past few years.

Vittorio Barbati

NOTES

(1) These systems, above all including the longer-range versions, ensure the achievement of the postulates laid down in the doctrine drawn up by the former SACEUR

EH-101 Anglo-Italian helicopter designed especially for naval purposes but also capable of being used in different ways in other sectors. Photograph of second prototype (first Italian construction) on take-off.

Supreme Allied Commander in Europe, General Rogers, formally adopted by NATO in 1984 and also known as the FOFA (Follow-On Forces Attack).

(2) The signing of the Warsaw Pact in 1955 represented the formalization of a multi-nation alliance that the Soviet Union had already set up in the forties by means of a series of secret bilateral agreements.

(3) Currently the United States has in commission or under construction a number of units designed for amphibious operations which are comparable in size and construction characteristics to medium displacement carriers.

(4) The Spanish helicopter carrier Principe De Asturias is based on the adaptation of an American design.

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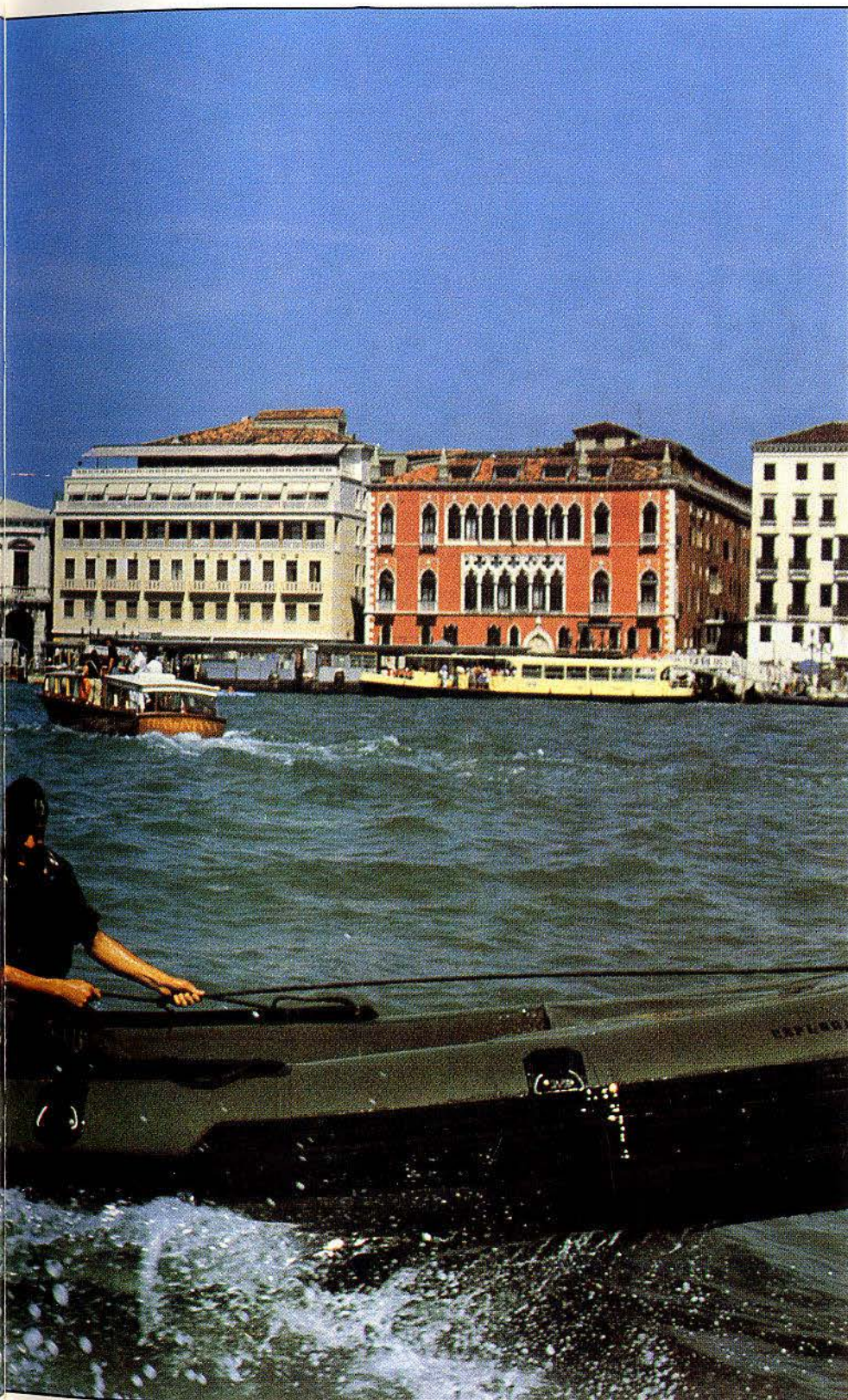
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THE HISTORY OF THE



ITALIAN MARINES



The first marine corps in recorded history was formed in Italy. It was composed of Roman soldiers, who were used for the first time in 260 B.C. under the command of Caius Duilius off Milazzo (Messina). The battle ended with the defeat of the Carthaginians.

The history of the US marines began in May 1775, at a meeting held inside the Tun Tavern in Water Street, Philadelphia. During the meeting it was decided to establish the famous Corps, a decision that was ratified by the US Congress on 10 November of the same year, which became the official date of the birth of the US Marine Corps.

Their fame is equal to that boasted, at different times, by the Roman Tenth Legion, the Spanish Flanders Regiment, Napoleon's Imperial Guard, the Folgore paratroops, the Green Berets in Vietnam and other similar special corps, units and forces.

However, the deserved renown of the US marines must not be allowed to cloud the fact that it was in Italy that the first units used as seaborne assault troops were established. In 260 B.C. the Roman fleet faced Carthaginian naval forces consisting of 120 quinqueremes and having a superiority of 20 units. The Carthaginians were greatly feared for their valour and prowess in naval battles and the outcome of that particular battle would probably have been different had the Romans not chosen the occasion to try out a new tactic based on combined naval and infantry tactics, namely that of coming alongside and boarding the enemy vessel. The Roman ships were equipped with "corvi" (strong gangplanks in the form of hook-shaped bridges) which they used to grasp the Carthaginian vessels, thus allowing their own troops to board the enemy ships and engage them, as they would on land, in hand to hand fighting. The Carthaginians were thus compelled to accept a kind of battle in which the Romans normally excelled.

Fortune smiled on Caius Duilius, who won the battle and inflicted



The 'lagunari' company of the "Truppe Anfibia"

heavy losses on the Carthaginians: 45 vessels sunk, 31 captured, 3,000 killed and 7,000 prisoners taken. The battle is still commemorated at the Roman Forum by the "rostral column", so called because the Roman quinqueremes were decorated with rostra.

The troops of **Caius Duilius**, by boarding enemy vessels and forcing the enemy to accept battle before landing, that is, on the hooked bridges, may rightly be considered as the forerunners of the marines.

But even without going back as far as 260 B.C. Italy can in any case claim to have been the first to introduce this prestigious specialization. It is sufficient to return to the year 1203, i.e. nearly six centuries before the foundation of the US

marine corps, to the year in which the old Doge of Venice, **Enrico Dandolo**, hired nearly 40,000 French, Flemish, Lorrainian and Venetian soldiers to carry out seaborne military actions during the Fourth Crusade, during which Byzantium (Constantinople) was conquered.

In April 1203, a fleet composed of 72 galleys and 140 transport vessels carrying the crusaders sailed from Zara towards the Bosphorus. Two months later, it reached Constantinople. After attacking the line of bastions protecting Byzantium and after occupying the imperial city, Enrico Dandolo set upon the throne the legitimate pretender **Alessio IV**. However, the reign of the latter was shortlived.

Soon after the Doge's departure, the garrison rebelled, and Alessio IV was dethroned and strangled by his

usurper, **Alessio Murzuflo**. Led by the Doge **Enrico Dandolo**, French troops were transported to the spot on Venetian vessels and Byzantium fell for the second time on 13 April 1204. Four horses, which still decorate St. Mark's Basilica in Venice, bear witness to that victorious expedition and to the rich booty obtained. In both operations the Doge Enrico Dandolo used a regiment of 'soldiers' subdivided into 10 companies. The established strength of these troops could vary from 1,000 in peacetime to 5,000 in wartime, and on exceptional occasions could be increased to 10,000 men. During the operations, the commander of the regiment would be on board the flagship, while each ship would carry one or two companies. The on-board units provided all the armed guards: an ensign, a sergeant, two corporals, a drum-

mer, a piper, 50-80 infantrymen.

This regiment had its headquarters at the Venice Lido, at San Nicolò, in the Quartiere Grande or Soldiers' Palace.

However, the troops of Enrico Dandolo were the forerunners of the "Fanti da mar" of the Venetian Republic (to which the present-day 'Lagunari' are related). They have been known by this name since 1550 and certainly also represent a 'marine corps' established before 1775.

The history of the 'fanti da mar' is closely related to the development of Venice and the gradual adjustments made to its defensive system with reference to the structures located at the port entrance at S. Nicolò di Lido.

The need for these structures became apparent as early as 1203, when Enrico Dandolo had large wooden huts built at San Nicolò to quarter the soldiers, and stables for the horses. To achieve this he used expedition type 'hutments' capable of satisfying the logistic requirements of the 40,000 men of the Fourth Crusade.

The same solution was adopted about one century later, during the Chioggia war (1378-1379). On that occasion the Venetian Republic, threatened by the Genoese, entrusted its defence to **Vettor Pisani** (1324-1380). The latter had two wooden towers built on each bank of the canal at the entrance to the port on which he placed crossbowmen and cannon. Between the two towers he placed small boats linked together by chains and separated by three ships armed with archers. The ships were covered with fresh hides in order to make them invulnerable to the enemy fire. Pisani also had a ditch with a 'ram-paro' (stone lined embankment) dug across the Lido to protect the Abbey of S. Nicolò, behind which he had large hutments constructed for



the troops. The latter complex, originally known as the 'Serraglio', was later to be converted into the present-day Guglielmo Pepe Barracks.

In 1229 the "Bersaglio" was built at San Nicolò di Lido to train young men in the use of the cross-bow. Infantry, cavalry and artillery units were stationed in this area, and where the Jewish cemetery now stands, there were also forges which provided the Lido garrisons and other Venetian strongholds with arms and ammunition.

Of special interest are the fortifications built between the 14th and 16th century: Castel Vecchio Fort (of which only a few drawings remain) and Castel Nuovo Fort, also known as S. Andrea, built between 1544 and 1559 by Sanmicheli, restored in 1571 and still in a good state of preservation even today.

Work on the Guglielmo Pepe barracks, a symbol of freedom and independence for Venice, began in 1591 and was completed in only five years. Its construction finally solved the problem of providing quarters for the troops that the peculiar defensive function of the Lido had brought to the Doges' attention as early as 1203.

Even today it retains its original shape of a square with a large internal courtyard. The entrance is surmounted by a bas-relief consisting of three parts. The upper part represents a walking lion which, behind an opened Gospel, bears a standard and a battlemented tower to indicate the military function of the building. In the middle part there are four blazons, carved during the Napolconic period, perhaps those of the Doge and the four Superintendents of the fortifications, under whom the construction was carried out. Their names, together with the year of foundation of the Barracks, are recorded in the Latin epigraph below: "In the reign of the Doge Marino Grimani these suburban quarters were built for soldiers by decree of the Senate, in the year of Christ 1595, by Giovanni Priuli, son of Giacomo Pietro Lando,

From top

The coat of arms of the 1st lagunari btl. of the "Serenissima" and of the "Sile" amphibious battalion, followed by several phases of the training



The war flag of the lagunari on parade

Domenico, son of Giovanni and Bolano, son of Marco, the triumvirate responsible for the fortifications”.

It is also possible that even Sanmicheli himself was consulted and even had a hand in the design. In fact, the entrance portal of the building (in Doric style) is reminiscent of the style of the entrance to Castel Nuovo (S. Andrea Fort). For the construction of this Barracks, capable of housing 2,000 soldiers, some 4,000 ducats were spent, and the Venetian Senate coined a commemorative medal for the occasion. For the ‘lagunari’ of the Amphibious Troops it symbolizes the ideal continuity of a line of development which illustrates their reason for being as a mechanized amphibious specialist corps and at the same time acknowledges them as the depositaries of a glorious tradition born with the ‘fanti da mar’, boosted by the ‘Cacciatori del Sile’ of the Venetian Republic, the Reggimento Real Navi of the Kingdom of Sardinia and the Borbonic ‘Corpo della Real Fanteria di Marina’.

The valour of the ‘Fanti da mar’ has emerged in numerous wartime actions, such as the deeds of Famagosta and Candia, the attempt

to force the port of Venice, which represented the ‘casus belli’ leading to the fall of the Venetian Republic and the wartime episode of the Cavallino, which made the ‘Cacciatori del Sile’ famous.

At Famagosta, after the Turkish landing in Cyprus in 1570, in May-August the year after 150 ships and 80,000 Turkish soldiers led by **Ali Pasha** joined battle with 4,000 Venetian soldiers and the inhabitants of the city itself. **Marcantonio Bragadin**, the commander of the Venetian together with **Luigi Martinengo**, realized that there was no chance of receiving reinforcements from the outside and negotiated a ceasefire with the Turks. On 4 August he led his men out of Famagosta. However, the Turks did not respect the agreement and, on 18 August, killed Marcantonio Bragadin after subjecting him to atrocious torture. In the ensuing bloody battle for the defence of the city, 2,000 Venetian soldiers and 50,000 Turks died.

At Candia, on 6 September, 1669, after three years of Turkish siege, the Venetians, led by **Francesco Morosini**, were forced to surrender. Morosini was accorded full honours by the Grand Vizir, **Koprolu**, who,

together with General **Jussuf**, had organized the Turkish siege. In that battle 39,000 Venetians and their Christian allies died and 100,000 Turks.

On 20 April 1797 three French warships appeared at the mouth of the port of Venice.

On peremptorily being ordered to withdraw by **Pizzimano**, the commander of S. Andrea Fort, one of the vessels did not obey and the garrison opened fire on the ship and then boarded it. Several Frenchmen, including the ship’s captain, were killed in the action. **Napoleon Bonaparte** was so incensed by this that he demanded the arrest of **Pizzimano** and the end of the ancient oligarchic regime of the Republic of Venice. This was decreed by the **Maggior Consiglio** on 12 May 1797 to avoid the city being put to the sack.

However, the most important wartime episode was the gallant attempt at defence by the Venetian Republic during the 1848-49 siege. The territory at the time was divided into three sectors. The Lido, the third sector, was equipped with thirteen fortifications and infantry, cavalry and artillery garrisons, which had distinguished themselves during the defence of Rome, were quartered at Serraglio. It was here that the troops were trained and one of their exercises, involving an attack on the Lido, was witnessed by **Daniele Manin**, together with two triumvirs, on 24 September 1848. At the time also the ‘Cacciatori del Sile’, a Venetian volunteer corps totalling some 500 men, organized by the cities of Treviso and Padua, were also quartered in the Pepe Barracks. On 21 October, by means of a simultaneous ground and sea attack, and in bad weather conditions, this unit surprised the Austrian positions of Cavallino and seized them. On 23 October General **Guglielmo Pepe**, commander in chief of the Army of the Venetian Republic, in

spected the 'Corpo dei Cacciatori del Sile' at the Lido, who were congratulated over their victory which allowed the defenders of the besieged city to break out of a long period of demoralizing operational deadlock.

The vigorous defence of Venice came to an end with the intervention of Field Marshal **Radestskj**, who brought the city back under Austrian dominion despite the heroism of the troops who laid down their lives for the city's independence.

Like the Venetian Republic, also the Sardinian and Bourbon Armies had marine units. The Sardinian Army had the Battaglione Real Navi, founded in 1821 during the reign of Carlo Felice. The Bourbon Army had a Corpo della Real Fanteria di Marina from 1806 which was used for fire support, boarding and landing operations. The 'Fanti da mar' of the Venetian Republic, who were swallowed up by the desperate defence of Venice, therefore survived in the Sardinian and Bourbon Armies.

When the Kingdom of Italy was founded (17 March 1861) no provision was made for this specialist corps in the new establishment until 1877. That year, in order to provide for the special military transport service in Venice a 'Reparto Genio Lagunari', the 14th Compagnia Zappatori Lagunari of the 2nd Pioneer Regiment, was set up and became the first Italian military unit to be given the name 'lagunari'. On 1st January 1883, in accordance with the Establishment Act of 29 June 1882, the 4th 'Genio Pontieri' Regiment was set up at Piacenza. It included also a 'lagunari' Brigade with two companies (obtained by splitting up the 14th 'Compagnia Zappatori Lagunari' relinquished by the 2nd Pioneer Regiment). In accordance with the Establishment Act of 23 June 1887, the 4th Pioneer Regiment lost the denomination of 'pontieri' and incorporated also the



lagunari Brigade with 2 companies (9th and 10th), increased to 3 (9th, 10th and 15th) in May 1915 (when Italy entered the war) and then to 8 (9th, 10th, 15th, 20th, 21st, 22nd, 23rd and 24th) on 1 December of the same year.

In September 1918, with the lagunari companies transferred from the 4th Pioneer Regiment, the 8th Lagunari Regiment was set up with 2 battalions, each of 4 companies. At the time of demobilization at the end of World War I, the Lagunari Regiment was disbanded and its units incorporated in the 4th Reggimento Pontieri which, on 1 April 1920, was given the name of Reggimento Pontieri e Lagunari del Genio, which it retained until 1933. On 15 May of that year, in accordance with Royal Decree of 28 December 1932, the Regiment was disbanded, definitively losing the denomination of 'Lagunari', in order to create the 1st Reggimento Pontieri of Verona and the 2nd Reggimento Pontieri of Piacenza.

As part of the Pioneer corps, between 1915 and 1918, the Lagunari were responsible for the river triangle between Mantova, Ferrara and Marano Lagunare, ensuring navigability over 1,700 km of rivers and canals. They participated in the defence of the lower Piave in June-July 1918, winning the praise of the Supreme Command and being awarded three Silver Medals and six

Bronze for Military Valour.

At the same time the Italian Navy continued the marine tradition by setting up the Corpo Fanteria Real Marina in accordance with Royal Decree of 28 March 1861. After this was disbanded (1878), special units were formed out of ship crews to carry out land operations. One of the memorable actions of these landing forces is the occupation of Tripoli (1911). The heroes of this operation, led by **Umberto Cagni**, won themselves the name of 'Garibaldini' of the sea and their flag was decorated with the Gold Medal for Military Valour. This flag later became the Flag of the Italian Navy and is kept on the flagship of the fleet.

During World War I, in October 1917, the seamen of the bases of Monfalcone and Grado and the Lower Tagliamento were incorporated into a battalion which participated in the defence of the Cortellazzo bridgehead on 9 November.

On 20 November of the same year the unit was converted into the Marine Regiment, with 3 battalions, and was given the sectorial responsibility of defending the Lower Piave. The city of Venice, as a token of its gratitude, offered the Marine Regiment its battle flag on 19 May 1918.

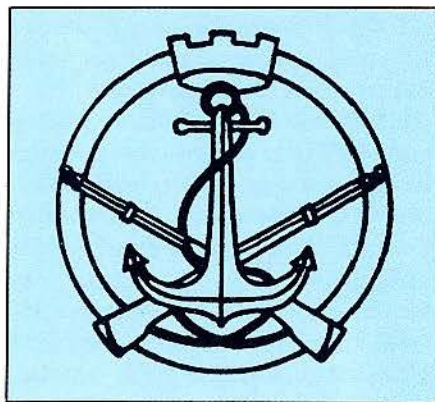
The Austrian offensive of 15 June 1918 was halted in the Piave delta with the decisive help of the

firepower of more than one hundred guns of the Navy Artillery Group and the Flag of the Sea Infantryman was decorated with the Cross of the Knight of the Military Order of Savoia and with the Silver Medal for Military Valour.

On 3 November of the same year, units of the Marine Regiment landed at Trieste, together with the bersaglieri of the 7th and 11th Regiments, thus bringing the Italian flag also to Istria and Dalmatia. Venice made the request that the Marine Regiment should be given the name of San Marco Regiment and that it should bear as an emblem the century-old winged lion of the city. The request was granted by Royal Decree on 17 May 1919.

Transformed into a battalion immediately after the war, the San Marco was again brought up to regimental strength at the outbreak of World War II (1940), and distinguished itself at Tobruk and in Tunisia. In 1944 it fought at Cassino and, together with the Nembo paratroops, it took part in the Liberation Campaign. It was reorganized into the San Marco Battalion and attached to the Folgore Division.

Somewhat similar to the San Marco Regiment are the Amphibian Troops, a modern mechanized-amphibious specialized corps of the Army. Although restructured several times, its origin goes back to 15 January 1951 when the Comando del Settore Forze Lagunari was established at the G. Pepe Barracks. It was conceived as an Army-Navy inter-service unit under the command of the V Comando Militare Territoriale (Comiliter) of Padua and the Comando Militare Marittimo Autonomo of the Upper Adriatic (C.MM.AA.) as far as disciplinary matters were concerned. The first CO of the Settore Forze Lagunari was Rear-Admiral **Giorgio Ghe**, who held the post from 15 January 1951 until 8 October 1952. On 1 July 1951 the establishment of the headquarters was completed and that of the Marghera Comando costiera lagunare was begun. On 15 October



From top
The badge of the amphibian troops,
lagunari during training, and their
emblem

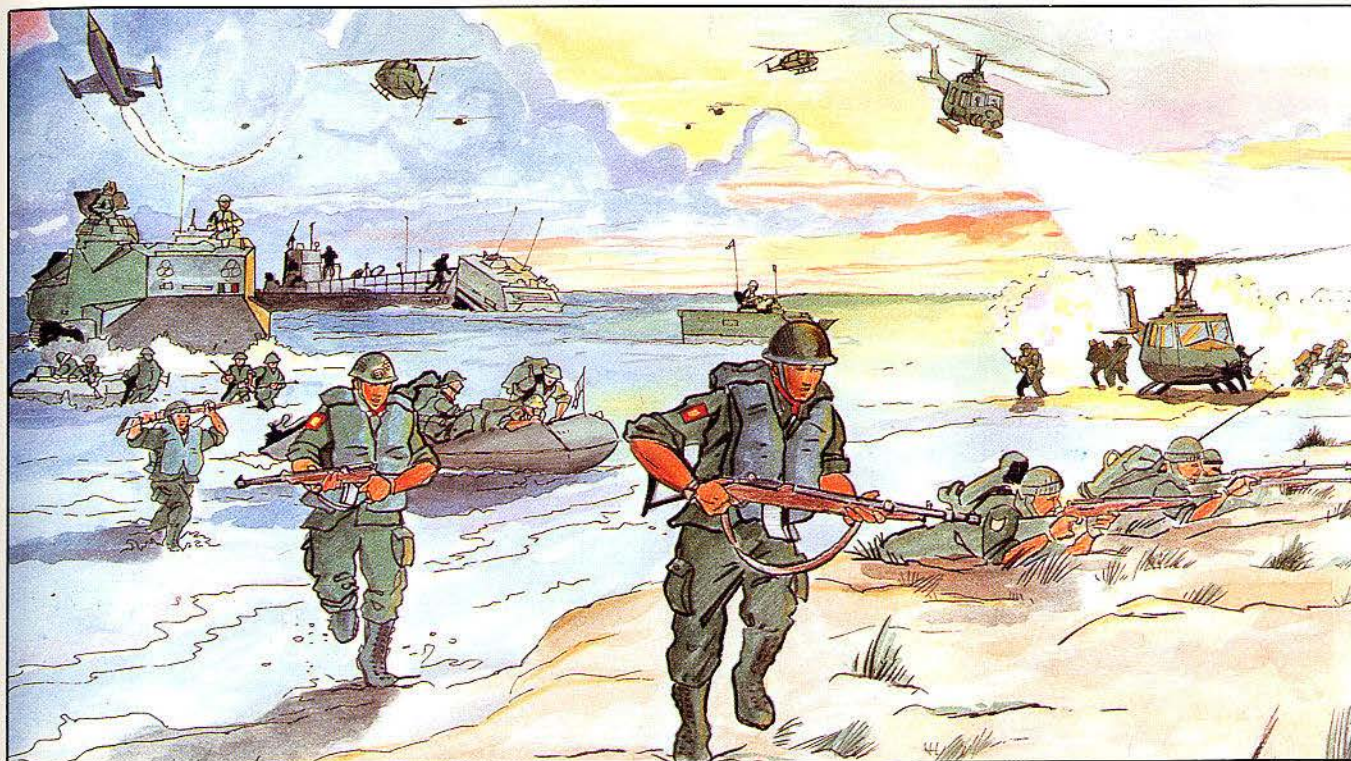
1951 the San Marco Battalion became part of the Settore Forze Lagunari, but only as far as training and discipline were concerned, remaining under the operational command of the Folgore Division. The San Marco Battalion was organized along the lines of an in-

fantry battalion but was almost entirely composed of naval personnel.

On 1 December 1951 the establishment of the Comando Settore Forze Lagunari and of the Marghera Battaglione costiero lagunare was officially recognized. On 1 January 1952 the Settore Forze Lagunari was placed under the direct command of the V Comando Militare Territoriale.

On 15 July 1952 the 'Reparto lagunare d'appoggio' (support unit) of the Marghera Battaglione costiero lagunare was established, while the Piave Battaglione costiero lagunare was set up on 1 September. On 1 January 1953, the Comando Settore Forze Lagunari of the V Comando Militare Territoriale was transferred to the 5th Army Corps, which had been established on 1 May 1952. On 1 January 1955, the 'Gruppo Mezzi da Sbarco' (landing craft group) was officially established with headquarters on the Island of S. Andrea (Vignole) and staffed with Navy personnel. On 15 January 1956 it was renamed Gruppo Mezzi Navali. On 1 July 1957 the San Marco Battalion was converted into the Isonzo Battalion, with personnel, material and vehicles provided by the Army. On 1 September 1957 the Settore Forze Lagunari, which had been commanded by army colonels since 1 March 1956, was renamed 'Raggruppamento Lagunare'. With the inclusion of the Isonzo Battalion and the concentration of the 'Reparti lagunari d'appoggio' into a single unit, it came to have the following organization on 1 May 1958:

- Group Command
- Command offices
- Command company
- Training company
- Signal company
- Marghera amphibious battalion
- Piave amphibious battalion
- Isonzo amphibious battalion
- Adria motorized battalion (only 3rd company established in peacetime)
- Light aircraft section
- Lagunari support unit
- Naval vehicles group (Navy personnel and vehicles)



Drawing of sea and air landing by amphibious troops

- Light workshop

On 25 October 1959 the Raggruppamento Lagunare received its battle flag in St Mark's Square. In order to satisfy the need for modernization of the 'lagunari' units they were given the capability of operating not only in an amphibious environment but also on land, using mechanized units, thus increasing their capacity to react and their firepower. In 1963 they were thus transformed into mechanized amphibious units, while in 1964 the Group's 'lagunari' support unit was restructured into a tank battalion initially equipped with Sherman tanks, and later with M/47 tanks. Although a newly established unit, the XXII Serenissima Tank Battalion, which was the name given to this unit, was based on the XXII Tank Battalion which, together with the IV, XXIII and XXXII battalions, was incorporated in the 33rd Light Tank Regiment set up in 1939 at Parma.

By order of the Chief of the General Staff on 24 May 1964, the Army reorganized the 'lagunari' into the Serenissima Lagunari Regiment.

This entailed the loss of the Gruppo mezzi navali, that is, of the last remaining Navy personnel, while the Serenissima Lagunari Regiment took on the following structure:

- Regimental headquarters (Venezia Lido)
- Command offices
- Command company
- Marghera amphibious battalion (Malcontenta)
- Piave amphibious battalion (Piave)
- Isonzo amphibious battalion (Villa Vicentina)
- XXII Serenissima Tank Battalion (S. Vito al Tagliamento)
- Boat section (Isola of S. Andrea)
- Amphibian section (Ca' Vio)
- Light workshop

On 1 January 1965, the Navy began re-forming (or rather reviving among its own units) the San Marco Battalion. This unit received its battle flag during a ceremony held on the Cruiser Garibaldi off Naples on 10 June of the same year.

The present San Marco battalion, quite apart from its actual size at any given historical moment, is thus essentially a continuation of the traditions of the Marine Infantry of the Kingdom of Sardinia.

The process of restructuring and reduction which was to affect army units during the following decade, did not spare the 'lagunari'. Quite the contrary.

The Serenissima Lagunari Regiment was extensively redimensioned and reorganized on 20 October 1975, when it was placed under the command of the mechanized Folgore Mechanized. It consisted of two battalions (1st Serenissima Lagunari Battalion, the Sile Amphibious Battalion) plus a recruit company (Amphibian Troops Lagunari Company). The latter supplies the tactical units by training national servicemen recruited in the Upper Adriatic regions. The 1st Battalion Lagunari "Serenissima" has inherited the flag and traditions of the Regiment to which the amphibian battalions Marghera, Piave and Isonzo belonged, and which were disbanded after the restructuring.

The Sile Amphibious Battalion, in-

initially called Battaglione Mezzi Anfibi "Sile", was established with the creation of the Amphibian Troops Headquarters for the purpose of concentrating into a single unit all the alternative equipment (boats, amphibians pneumatic boats, etc.) on issue to the specialist unit.

The "Sile" also includes the Explorers Platoon, an essential unit in amphibian operations.

At the recommendation of the Army Chief of the General Staff, the Sile Battalion received its War Flag from the Head of State Giovanni Leone on 10 October 1976, which thus confirmed the operational status of the unit and satisfied all its personnel, who aspired after this symbol.

By decree signed on 25 June 1984 by Defence Minister Giovanni Spadolini it was officially recognized that the 'Lagunari' specialization of the Italian Infantry had existed since 9 January 1951.

It was decreed by the Military Ordinary, Monsignor Gaetano Bonicelli on 26 August 1984, that St Mark the Evangelist is the Patron Saint of the Amphibian Troops and thus of this specialist unit.

Lastly, by decree n. 550 of 17 June 1985 of the President of the Republic Sandro Pertini the Association of Amphibious Lagunari Troops (A.L.T.A.), set up on 15 June 1983 in Venice in order to strengthen the ties between 'lagunari' in service and retired members, was recognized as having legal status.

The Amphibious Troops, under the direct command of the 5th Army Corps since 31 October 1986, in accordance with their planned tactics, are trained to live, move and operate in a lagoon environment where the infantry have difficulty in operating in optimal conditions. Linked as it is essentially to the nature of the ground over which



they will be called upon to operate, their training marks them out as great specialists. The 'lagunari' are trained to use all the available vehicles and boats and are given intensive instruction in all amphibian aspects: swimming, sea and river navigation, landing techniques. The unit can act in a purely amphibious, mechanized or mixed mode, according to the tactical situation. In defensive situations to control the lagoon environment, the mouths of rivers and watercourses in general and in landing operations (beach reconnaissance, establishment of beachheads, etc.) the perfect knowledge of land and amphibian tactics possessed by the lagunari allows them to operate effectively. Modern lagunari display a high degree of specialization based on physically fit, well-trained personnel with a high morale.

These well trained troops are therefore completely at ease in operations carried out in a lagoon environment. They can adapt easily to a wide range of climatic conditions and have a great capacity for survival in all situations. Experienced in the techniques of infiltration, ambush, raids and surprise attacks, the lagunari form a high yield group, welded into a multi-purpose, modern, efficient mechanized and

amphibious unit.

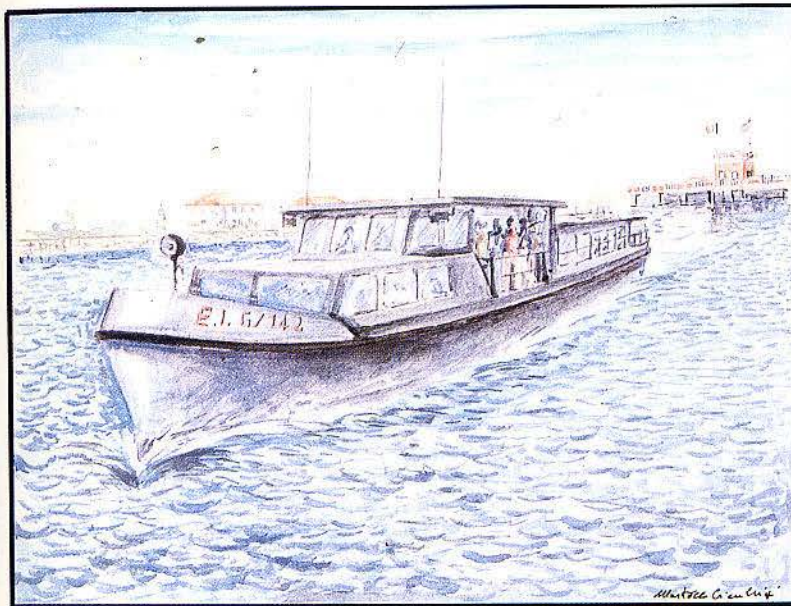
In short, it is an all-weather unit which deploys men and special vessels and vehicles according to specific tactics not only in its traditional environment, i.e. where the water and the land meet and merge, but also on ground where mechanized units normally operate.

The lagunari units have a wide range of equipment (boats, tracked and wheeled vehicles) which allow them to move over land, sea, lagoons and marshes. This equipment contributes to the multipurpose capability displayed by the Amphibian Troops both in their traditional lagoon environment and in other operational zones.

The lagunari were recently included among the Rapid Intervention Force (Fo.P.I.) to be deployed in all types of public calamity (floods, earthquakes, etc.). In this capacity the Amphibian Troops participate actively in controlling and temporarily repairing the embankments of the watercourses in the Cavallino Peninsula (Province of Venice) each time they flood as a result of the 'high water' phenomenon afflicting the area during the Autumn-Winter season.

In the prestigious name of "Serenissima", which evokes memories of ancient glories and the

MOTOR VESSEL FOR PERSONNEL TRANSPORT



Personnel transport vessel. Used mainly to ferry troops going on leave from the Island of S. Andrea to Venice Lido, but also used to transport personnel on the occasion of ceremonies and the transfer of units for logistic and training purposes.

CARATTERISTICHE PRINCIPALI

lunghezza f.t. x larghezza x altezza	m 22,90 x 4,60 x 2,07
dislocamento	ton 35,720
persone trasportabili	n. 145
velocità massima	nodi 12
equipaggio	1 Sott.le pilota, 1 Sott.le motorista, 2 lagunari prodieri
motore	AIFO 828 M con una potenza massima di 206 hp a 2100 rpm
autonomia	30 ore moto

symbol of the majestic lion, the Lagunari continue with great pride in the tradition of the 'Fanti da mar'. Their enthusiasm is the same as that which animated the Venetians at the time of the 4th Crusade. They participated in the historical events leading up to the birth of national awareness. In conclusion, while it is true that today the amphibian operations of the lagunari, which take place in waves, must be supported by naval and air units, and that helicopters are required for special operations related to the sea, it is also true that the predominant force of an amphibian 'wave' comes from the courage, determination and boldness of the men themselves — the Lagunari. 'St. Mark!' is their enthusiastic battle cry.

The winged lion is their emblem. Their motto is "Like the reef I break... Like the wave I overwhelm!", an oath which reflects a great ideal force.

Faithful to the unalienable values of their tradition, the Lagunari of Italy face the present with pride, encouraged by the appreciation and esteem expressed by the civilian and military authorities. "Irreplaceable components of our Army..." is the definition given by General Ciro Di Martino, Chief of the Army General Staff, on the occasion of the celebration on the 25 June 1987 of the third anniversary of the official recognition of this specialist corps.

Mario Garano
Rosario Mangione



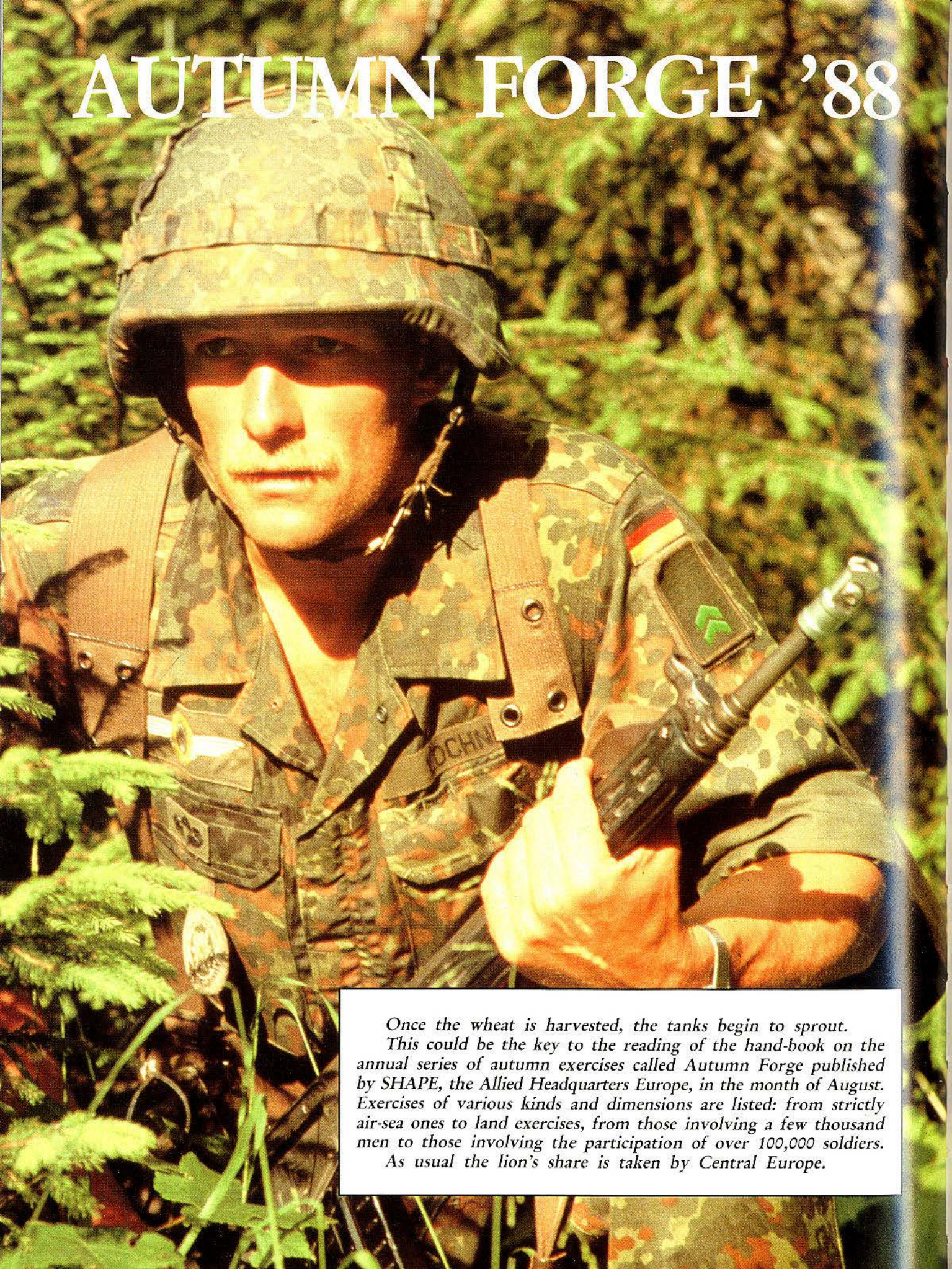
Colonel Rosario Mangione attended the Military Academy, Service Branch School, War College, Interservice Staff Institute and the NATO Defense College. He has served with the Raggruppamento Lagunari "Serenissima" as OAIO Officer, with HQ of "Folgore" Mechanized Division as OAIO officer and Head of Operations Section, at HQ Allied Ground Forces in Southern Europe as Head of Planning Office of the Operations Bureau, Head of the Studies and Inspections Section of the Training Office and Head of the General Staff Secretariat. He commanded a platoon and a company of the Reggimento Lagunari "Serenissima" and has also commanded the 1st Battalion Lagunari "Serenissima". He graduated in Political Science (political-administrative division) at the University of Padua.

Since 23 September 1987 he has been CO of the "Serenissima" Amphibian Troops.



Mario Garano has been a professional journalist since 1968 and, for more than twenty years, has followed Defence matters. He has worked for dailies and periodicals, and did his apprenticeship with the "Messaggero Veneto" of Udine. Since 1972 he has headed the Venice Regional Office of AGI (Agenzia Giornalistica Italia).

AUTUMN FORGE '88



Once the wheat is harvested, the tanks begin to sprout. This could be the key to the reading of the hand-book on the annual series of autumn exercises called Autumn Forge published by SHAPE, the Allied Headquarters Europe, in the month of August. Exercises of various kinds and dimensions are listed: from strictly air-sea ones to land exercises, from those involving a few thousand men to those involving the participation of over 100,000 soldiers. As usual the lion's share is taken by Central Europe.

The AFCENT headquarters is privileged for two reasons: firstly, the great number of soldiers of the most diverse nationalities which in case of war would form the forward defensive shield along the border with Warsaw Pact countries, and secondly the possibility of training land units on the territory without "closing them up" in firing ranges.

Moreover, the very word "land" implies a greater facility in the management of relations with information agencies while it is much more difficult to give the idea of what is going on in the sky or at sea.

After some years' absence, we went back to the tactical stage of the **Reforger** exercise, which besides support units air-sea bridge borne from the United States, engaged units of five nationalities quartered in Europe. It must also be remembered that this year's **Reforger** is the twentieth of the series, begun in far off 1969. The origin of the annual exercise aiming at strengthening the European front dates back to the United States' decision to withdraw one of the divisions then quartered in Germany, the 24th Infantry Division, leaving in Europe only one of its Brigades and moving Headquarters, support units and 2 Brigades overseas; the decision was accepted by Great Britain and Federal Germany provided that the United States committed itself to move the Division to the old continent each year. it was also decided that the heavy equipment should be left in Europe in special depots, thus allowing the Division to take part in an exercise.

The agreement, known as the London Trilateral Agreement, was signed in 1967 and two years later the first **Reforger** was held. Since then many Divisions have come to Europe with the **Reforger** to take part in the exercise which usually proves the most crowded of the **Autumn Forger**. This year's exercise was preceded by a manoeuvre led by units of the Southern Headquarters of the German Territorial



Army which guaranteed security along the routes of approach and in the communication areas. They also built bridges over the main rivers where part of the units coming from the United States passed, shaming what should be one of the tasks of the Territorial Army which in times of war would rest under national command.

This year the **Certain Challenge**, this the name given to the exercise, saw for the first time the two United States Army Corps fight one against the other. These were the V (Frankfurt) against the VII (Stuttgart), which took part in the manoeuvre with some of their Divisions reinforced by two German Divisions, by the 4th team of the Canadian Brigade and by small Danish and French groups: in fact the French, especially a reduced group of the 13th Parachutist Dragoon Regiment, the special forces from beyond the Alps, took part on a bilateral basis in a United States long range patrol exercise later included in **Certain Challenge** and this because France is not comprised in the integrated military system of the Alliance. We shall not go into the details of what is implied in activating and moving the units. It is enough to underline the effort required to move 17,000 men belonging to different units among which the 1 Infantry Division (Fort Riley,

A column of M 1A1 Abrams of the 3 Infantry Division of the United States VII Army Corps in action in the German countryside.

Kansas), the 3 Armoured Cavalry Regiment (Fort Bliss, Texas), the 197 Independent Infantry Brigade (Fort Benning, Georgia), the 1 Army Corps Headquarters (Fort Lewis, Washington) and the 2 Battalion of the 128 Infantry regiment of the Wisconsin National Guard, besides about seventy other minor units coming from about thirty States. It must be noted that the 197 Brigade moved to Europe with all its vehicles, both light and heavy.

As already said it was the first time that both United States Army Corps took part in an exercise under the control of the US Army Headquarters in Europe, better known as **Usareur**.

The participation of command posts at Army Corps level brought commanders of the United States Army, together with those in charge of the Central European Army Group (**Centag**) to consider the basic aspect of command, control and communication operations.

Without a reliable C3 system, in fact, it is impossible to manage the activities of 7,000 tracked vehicles, of which 1,000 tanks, 15,000 wheeled vehicles and over 600 helicopters.

In honour of the detente the op-



posing parties were one south and the other north of the front, with the southern troops characterized by gold and the northern ones by blu.

The VII Army Corps operated in the South and deployed a single Division, the 3rd Infantry one, while the 1st Armoured Division, engaged as umpire, was replaced by the 1st Infantry Division coming from the United States. These two large units were joined by the 12th German Panzerdivision, the 4th CMBG (Canadian Mechanized Brigade Group) and the 2nd Armoured Cavalry Regiment. To the north, the Corps participated with all the units of the organization, 8th Infantry Division, 3rd Armoured Division, and 11th Armoured Cavalry Division, joined by the 10th Panzerdivision, the 197th Independent Infantry Brigade and the 3rd Armoured Cavalry Regiment. During the **Certain Challenge** the game was completely free, while the aircraft of the 4th ATAF carried out about 550 missions a day both in the gold and

in the blu role within the **Cold Fire** exercise. The area of the exercise fitted more or less in the Nuremberg — Stuttgart — Ulm triangle, but in fact operations were carried out around the front situated a little south of Würzburg; the fact that the exercise was not “guided” by the Higher Headquarters caused combats to be carried out in a very restricted area, with some complaints by those who found their houses besieged by tanks belonging first to the one opposing party and then to the other. Attacks led by both parties after having accurately sought the “weak side” of the enemy brought to a rotation of the front more than a shift: in fact both parties attacked on their own left flank and tried to penetrate the enemy defences. The front, therefore, changed slowly from north-west to south-east. Nonetheless, those in charge were satisfied: “The **Certain Challenge** exercise was in many ways very productive”, said General Galvin, Chief NATO Commander in Europe.

“Firstly, it involved both Army Corps Headquarters, bringing training to the highest degree, secondly, the beautiful weather favoured the exercise and reduced damages. The high international participation proved that we are capable of working together. The availability rate of equipment was superior than that obtained before in similar manoeuvres. Lastly, we registered less accidents than in the past, though some unfortunately occurred.

We thus achieved the two appointed goals: prove our preparation for deterrent purposes and increase our training level».

Among the new arm systems seen on the field two greatly influenced the trend of the battle; as regards reconnaissance along the front, the blu forces employed the first OH-58D in Europe.

With their TV monitors and infrared FLIR (forward looking infra-red) placed in the ball lopping above the rotor the above aircraft operated sheltered from natural obstacles ex-

Left

Soldiers on an United States M 1A1 Abrams check a possible axis of penetration taking advantage of the cover of the terrain.

Right

Similar to M 901 tank destroyers the artillery observation vehicles FISTV M 981 equipped with laser indicators are nowadays constantly present at the front.

posing only the sensor group thus remaining almost out of sight of the opposing party; attack helicopter units based on the AH-64 Apache will shortly receive this aircraft which will permit to improve the action of command and control by the "airborne captain" at present compelled to fly on an AH-64 with a resulting waste of resources. The other essential point is the ever greater importance given to artillery. "This was one of the main aims", said General Saint, Commander of the Central Army Group, of the US Army Europe and of the 7th United States Army Corps.

"I wanted to see how the available fire was exploited, by putting a finger on a point on the map and asking how many pieces of artillery could hit that point and in what way the fire would be directed". The primary support action by indirect firing arm systems became obvious because of the very high number of tracked vehicles for fire observation deployed on the field.

The United States added a M981 FISTV (Fire Support Team Vehicle) to each front line unit, especially to the armoured ones; based on the hulk of the M113A2, the above vehicle is much like the M901 ITOW as even the turret is in every way similar to that of the tank destroyer.

Indeed, some crews have painted the two back vent holes of the launcher black, being this the main difference between the two vehicles, in order to increase the likeness, as for the enemy to eliminate a M981 means to avoid the intervention of one or more artillery batteries. Equipped with a navigation system and an indicating and spotting laser,



the above vehicles may be employed both for advanced observation and target designation for laser guided arm systems. In this respect general Saint stated: "We did not sham the use of Copperhead grenades or of the Hellfire as this is difficult when the laser cannot be employed because of the danger it represents. I therefore decided not to employ these systems as, moreover, the procedure is quite simple: it is sufficient that the vehicle aim the ray against the target and someone further back load the round and fire".

We got the same impression from another exercise we saw, the **Free Lion** a five-year exercise of the 1

One of the new United States hummer jeeps. The only problem that these extremely mobile vehicles have to face in central Europe is due to their remarkable size.

Dutch Army Corps which engaged on the field, in an area south of Hanover, two German mechanized Brigades, one United States armoured Brigade and a British airborne battalion for a total of 44,000 men. Here too the United States and Germany deployed observation systems; if the US Army employs M 981 FISTV, the Bundesheer employs various systems. Two systems are used for observation, the



Above
 Canadian soldiers engaged in the *Certain Challenge*; they are armed with the recently adopted weapons: the M16A2 rifle and the MAG machine-gun.

Right
 A Dutch Leopard 2 in action during the *Free Lion Exercise*: an agreement between Holland and Germany states that the Leopard 2 of the two armies be absolutely identical.



most complete of which is based on the omnipresent hull of the M 113 and is equipped with a laser rangefinder, navigation system and data link, while on part of the old 90mm cannon-equipped tank destroyers the weapon has been removed and replaced with an observation periscope.

Double line also as regards artillery radars supplied at Division level and fitted onto M 113: the excellent French RATAC radar is employed in support of the old Green Archer and is capable of acting as a surveillance radar and of observing friendly artillery fire.

Mention must be made of the participation in the **Free Lion** exercise

of the 11 Electronic Warfare Company, first unit of this kind within the Dutch Army which employed materials of a German unit exactly like those it will be allotted in the near future; a further sign of the interoperability already pursued by Dutch and Germans as regards the Leopard 2.

Worthy of notice was the visit of a group of about thirty observers to the **Free Lion** exercise. For the most part they came from Eastern countries such as Hungary, the Soviet Union, Poland, Bulgaria and Czechoslovakia, but neutral and NATO nations, among which Italy, were also represented.



Right
A Dutch reconnaissance patrol on a Land Rover.

Above
A German M113 equipped with a RATA radar for the surveillance of the battle field and the direction of the fire.

We met them while they were visiting the 3/66 United States tank battalion where they were able to observe closely a Command Post, an M1A1 Abrams tank, an M981 FISTV, a Hummer, the new US Army jeep, some systems allotted to the Corps of Engineers and other equipment. These visits are carried out in conformity with the agreements signed in Helsinki in 1975 and in Stockholm in 1986 which consider an exchange of observers when training activities involve over 17,000 men. Other delegations visited the various exercises in course, among which, of course, the vaster of them all, the **Certain Challenge**.

At that same time, that is around mid September, another important exercise, called **Golden Crown**, was being carried out. Here the Belgian Army Corps together with British and German troops for a total of 30,000 men played the leading role. Traditionally, the main British exercise is held later: this year it was the turn of the 3 Armoured Division which was engaged for all the month of November in the **Iron**



Hammer exercise together with a German Brigade.

This was the first time that the new British VCC Warrior was employed on the terrain. This made a rapid appearance in a reduced number of samples during the most important British after-war exercise on European territory called **Lionheart** which took place in 1984. It must here be remembered that the British Army will soon have to decide what to replace the Chieftain with, and for the first time the choice is not limited to a nationally produced vehicle; exercises such

as the **Iron Hammer** may thus be useful also to compare the vehicles allotted to the various allied armies, thus completing the tests carried out in the firing ranges.

As customary, therefore, the series of exercises held in the central sector of the Alliance have permitted to evaluate the degree of readiness of the units of the various nations. This is much more difficult as regards the southern and northern fronts characterized by the primary importance of the air-sea instrument.

Paolo Valpolini

THE WAR IN THE MOUNTAINS

by
RUDYARD KIPLING
1917



III ONLY A FEW STEPS HIGHER UP

FOR A SPECIAL JOB, specialists, but for all jobs, youth above everything! That portion of the Italian frontier where men must mountaineer as well as climb is held with the Alpine regiments.

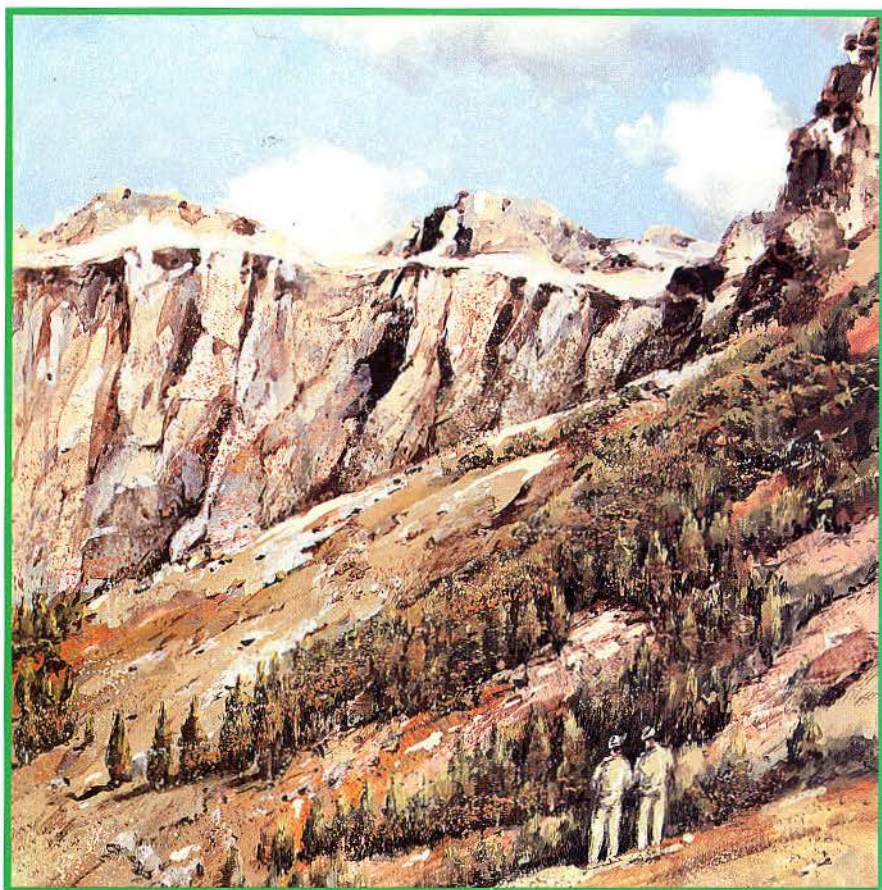
The corps is recruited from the people who inhabit, and know what is the mind of, the mountains — men used to carry loads along eighteen-inch paths round thousand foot drops. Their talk is the slang of mountains, with a special word for every mood and state of snow, ice, or rock, as elaborately particular as a Zulu's talk when he is describing his cattle. They wear a smash hat adorned with one eagle feather (worn down to an honourable stump, now); the nails upon their boots resemble, and are kept as sharp as, the fangs of wolves; their eyes are like our airman's eyes; their walk on their own ground suggests the sea; and a more cheery set of hard-bitten, clean-skinned, steady-eyed young devils I have never yet had the honour to meet.

'What do you do?' I was foolish enough to demand of them from the security of a Mess-room seven thousand feet up among pines and snows. For the moment, the forest cut off the oppression of the mountain view.

'Oh, come and see,' said these joyous children. 'We are working a few steps higher up the road. It is only a few steps.'

They took me by car above the timberline on the edge of the basin, to the steep foot of a dominant rock wall which I had seen approaching, for hours back, along the road. Twenty or thirty miles away the pillared mass of it had looked no more than implacably hostile — much as Mont Blanc looks from the lake. Coming nearer it had grown steeper, and a wilderness of wrathful crags and fissures had revealed itself. At close range from almost directly below, the thing, one perceived, went up sheer, where it did not bulge outward, like a ship's side at launching. Every monstrous detail of its face, etched by sunshine through utterly clear air, crashed upon the sight at once, overwhelming the mind as a new world might, wearying the eye as a gigantically enlarged photograph does.

It was hided by a snow tunnel, wide enough for a vehicle and two mules. The tunnel was dingy brown where its roof was thick, and lighted by an unearthly blue glare where it was thin, till it broke into blinding daylight where the May heat had melted out the arch of it. But there was graded gravel underfoot all the way, and swilling gutters carried off the snow-drip on either side. In the open or in the dark. Italy, makes but one kind of road.



'This is our new road,' the joyous children explained. 'It isn't quite finished, so if you'll sit on this mule, we'll take you the last few steps, only a few steps higher.'

I looked up again between the towering snowbanks. There were not even wrinkles on the face of the mountain now, but horrible, smooth honey-coloured thumbs and pinacles, clustered like candle-drippings round the main core of unaffected rock, and the whole framing of it bent towards me.

The road was a gruel of gravel, stones, and working-parties. No one hurried; no one got in his neighbour's way; there were very few orders; but even as the mule hoisted herself up and round the pegged-out turns of it, the road seemed to be drawing itself into shape.

There are little engine-houses at the foot of some of the Swiss bob-runs which, for fifty centimes, used to hoist sportsmen and their bob-sleds up to the top again by funicular. The same arrangement stood on a platform nicked out of rock with the very same smell of raw planks, petrol, and snow, and the same crunch of crampons on slushy ground. But instead of the cog railway, a steel wire supported on frail struts and carrying a steel latticed basket, ran up the face of the rock at an angle which need not be specified. Qua railway, it was nothing — the merest grocery line, they explained — and, indeed, one had seen larger and higher ones in the valleys lower down; but a certain nakedness of rock and snow beneath, and side-way blasts of air out of funnels and rifts

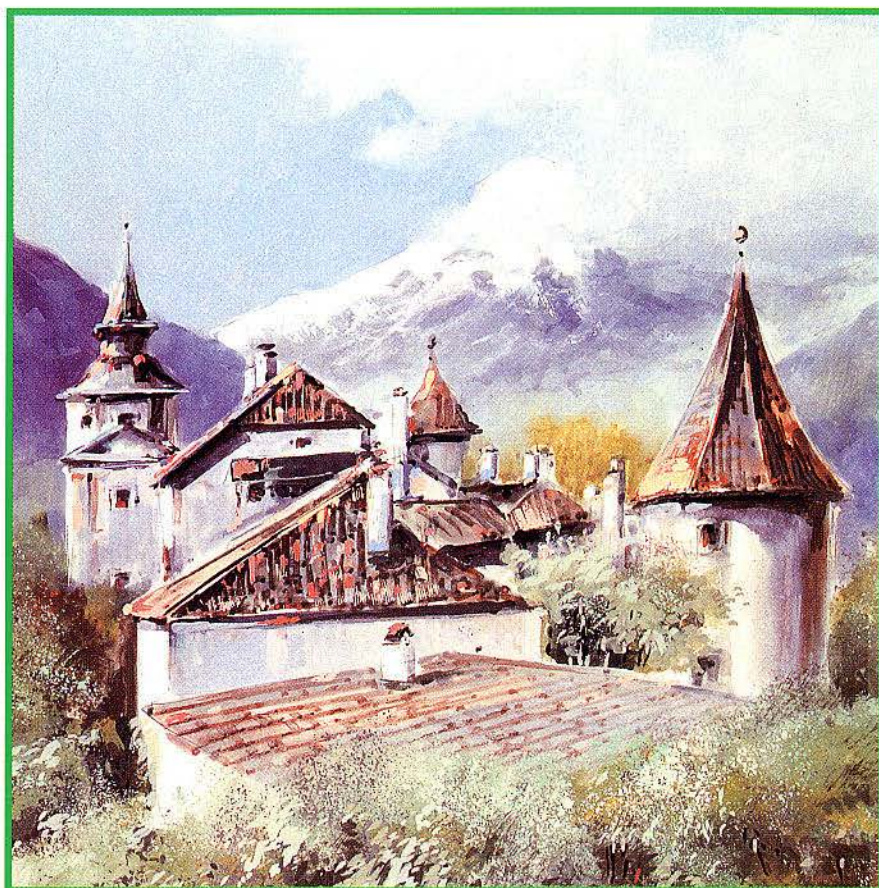
that we slid past, made it interesting.

At the terminus, four or five hundred feet overhead (we were more than two thousand feet above the Mess-house in the pines), there was a system — it suggested the marks that old ivy prints on a wall after you peel it off — of legends and paths of slushy trampled snow, connecting the barracks, the cook-house, the officers' Mess and, I presume, the parade ground of the garrison. If the cook dropped a bucket, he had to go down six hundred feet to retrieve it. If a visitor went too far round a corner to admire the panoramas, he became visible to unartistic Austrians who promptly loosed off a shrapnel. All this eagle's nest of a world in two dimensions boiled with young life and energy, as the planks and girders, the packages of other stuff came up the aerial; and the mountain above leaned outward over it all, hundreds of feet yet to the top.

'Our real work is a little higher up — only a few steps,' they urged.

But I recalled that it was Dante himself who says how bitter it is to climb up and down other people's stairs. Besides, their work was of no interest to any one except the enemy round the corner. It was just the regular routine of these parts. They outlined it for the visitor.

'You climb up a fissure of a rock chimney — by shoulder or knee work such as mountaineers understand — and at night for choice, because, by day, the enemy drops stones down the chimney, but then they had



to carry machine-guns, and some other things, with them. ('By the way, some of our machine-guns are of French manufacture, so our Machine Gun Corps' souvenir — please take it, we want you to have it — represents the heads of France and Italy side by side.')

And when you emerge from your chimney — which it is best to do in a storm of a gale, since nailed boots on rock make a noise — you find either that you command the enemy's post on the top, in which case you destroy him, or cut him off from supplies by gunning the only goat-path that unsuspected them; or you find the enemy commands you from some unsuspected cornice or knob of rock. Then you go down again — if you can — and try elsewhere. And that is how it is done all along that section of frontier where the ground does not let you do otherwise.

Special work is somewhat different. You select a mountain-top which you have reason to believe is filled with the enemy and all his works. You effect a lodgement there with your teeth and toe-nails; you mine into the solid rock with compressed-air drills for as many hundred yards as you calculate may be necessary. When you have finished, you fill your galleries with nitroglycerine and blow the top off the mountain. Then you occupy the crater with men and machine-guns as fast as you can. Then you secure your dominating position from which you can gain other positions, by the same means.

'But surely you know all about this. You've seen the Castelletto,' some one said.

It stood outside in the sunshine, a rifted bastion crowned with peaks like the roots of molar-teeth. The largest peak had gone. A chasm, a crater and a vast rock slide took its place.

Yes, I had seen the Castelletto, but I was interested to see the men who had blown it up.

'Oh, he did that. That's him.'

A man with the eyes of a poet or musician laughed and nodded. Yes, he owned, he was mixed up in the affair of the Castelletto — had written a report on it, too. They had used thirty-five tons of nitroglycerine for that mine. They had brought it up by hand — in the old days when he was a second lieutenant and men lived in tents, before the wire-rope railways were made — a long time ago.

'And your battalion did it all?'

'No — no: not at all, by any means, but — before we'd finished with the Castelletto we were miners and mechanics and all sorts of things we never expected to be. That is the way of this war.'

'And this mining business still goes on?'

Yes: I might take it that the mining business **did** go on. And now would I, please, come and listen to a little music from their band? It lived on the rock ledges — and it would play the Regimental and the Company March; but — one of the joyous children shook his head sadly — 'those

Austrians aren't really musical. No ear for music at all.'

Given a rock wall that curves over in a sounding-board behind and above a zealous band, to concentrate the melody, and rocks ribs on either side to shoot the tune down a thousand feet on to hard snowfields below, and thunderous echoes from every cranny and **cul de sac** along half a mile of resonant mountainface, the result, I do assure you, reduces Wagner to a whisper. That they wanted Austria was nothing — *she* was only just round the corner — but it seemed to me that all Italy must hear them across those gulfs of thin air. They brayed, they neighed, and they roared; the bandmen's faces puckered with mirth behind the brasses, and the mountains faithfully trumpeted forth their insults all over again.

The Company March did not provoke any applause — I expect the enemy had heard it too often. We embarked on national anthems. The **Marsellaïse** was but a **success d'estime**, drawing a perfunctory shrapnel or so, but when the band gave them and the whole accusing arch of heaven the **Brabanconne** the enemy were much moved.

'I told you they had no taste,' said a young faun on a rock shelf; 'still, it shows the swine have a conscience.'

But some folk never know when to stop; besides. It was time for the working-parties to be coming on off the roads. So an announcement was made from high overhead to our unseen audience that the performance was ended and they need not applaud any longer. It was put a little more curtly than this, and it sounded exactly like ears being boxed.

The silence spread with the great shadows of the rock towers across the snow: there was tapping and clinking and an occasional stone-slide far up the mountain side; the aerial railway carried on as usual; the working parties knocked off, and piled tools, and the night shifts began.

The last I saw of the joyous children was a cluster of gnome-like figures a furlong overhead, standing, for there was no visible foothold, on nothing. They separated, and went about their jobs as single dots, moving up or sideways on the face of the rock, till they disappeared into it like ants. Their real work lay 'only a few steps higher up' where the observationposts, the sentries, the supports and all the rest live on ground compared with which the baboon-tracks round the Mess and the barracks are level pavement. Those rounds must be taken in every weather and light; that is, made at eleven thousand feet, with death for company under each foot, and the width of a foot on each side, at every step of the most uneventful round. Frosty glazed rock where a blunt-nailed boot slips once and no more; mountain blasts round the corner of ledges before the body is braced to them; a knob of rot-

ten shale crumbling beneath the hand; and ankle twisted at the bottom of a ninety-foot rift; a roaring descent of rocks loosened by snow from some corner the sun has undermined through the day — these are a few of the risks they face going from and returning to the coffee and gramophones at the Mess, 'in the ordinary discharge of their duties.'

A turn of the downward road shut them and their world from sight — never to be seen again by my eyes, but the hot youth, the overplus of strength, the happy, unconsidered insolence of it all, the gravity, beautifully maintained over the coffee cups, but relaxed when the band played to the enemy, and the genuine, boyish kindness, will remain with me. But, behind it all, fine as the steel wire ropes, implacable as the mountain, one was conscious of the hardness of their race.

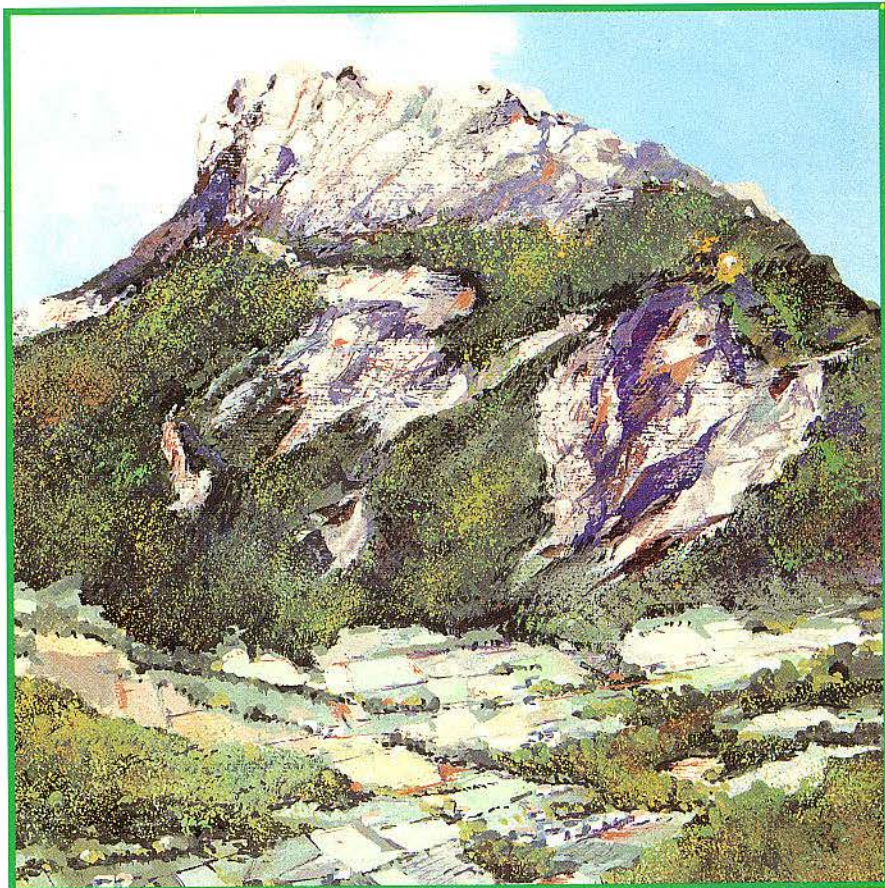
THE TRENTINO FRONT

It does not need an expert to distinguish the notes of the several Italian fronts. One picks them up a long way behind the lines, from the troops in rest or the traffic on the road. Even behind Browning's lovely Asolo where, you will remember, Pippa passed, seventy-six years since, announcing that 'All's right with the world,' one felt the tightening in the air.

The officer, too, explained frankly above his map: 'See, where our frontier west of the Dolomites, dips south in this V-like spearhead. That's the Trentino. Garibaldi's volunteers were in full possession of it in our War of Independence. Prussia was our ally then against Austria, but Prussia made peace when it suited her — I'm talking of 1864 — and we had to accept the frontier that she and Austria laid down. The Italian frontier is a bad one everywhere — Prussia and Austria took care of that — but the Trentino section is specially bad.'

Mist wrapped the plateau we were climbing. The mountains had changed into rounded, almost barrel-shaped heights, steep above dry valleys. The roads were many and new, but the lorries held their pace; the usual old man and young boy were there to see to that. Scotch moors, red uplands, scarred with trenches and punched with shell-holes, a confusion of hills without colour and, in the mist, almost without shape, rose and dropped behind us. They hid the troops in their folds — always awaiting troops — and the trenches multiplied themselves high and low on their sides.

We descended a mountain smashed into rubbish from head to heel, but still preserving the outline, like wrinkles on a forehead, of trenches that had followed its contours. A narrow, shallow ditch (it might have been a water-main) ran vertically up the hill, cutting the faded trenches at right angles.



'That was where our men stood before the Austrians were driven back in their last push — the Asiago push, don't you call it? It took the Austrians ten days to work half-way down from the top of the mountain. Our men drove that trench straight up the hill, as you see. Then they climbed, and the Austrians broke. It's not as bad as it looks, because, in this sort of work, if the enemy uphill misses his footing, he rolls down among your men, but if you stumble, you only slip back among your friends.'

'What did it cost you?' I whispered.

'A good deal. And on that mountain across the gorge — but the mist won't let you see it — our men fought for a week — mostly without water. The Austrians were the first people to lay out a line of twelve-inch shell-holes on a mountain's side to serve as trenches. It's almost a regulation trick on all the fronts now, but it's annoying.'

He told tales of the long, bitter fight when the Austrians thought, till general Cadorna showed them otherwise, they had the plains to the south at their mercy. I should not care to be an Austrian with the Boche behind me and the *exercitus Romanus* in front.

It was the quietest of fronts and the least ostentatious of armies. It lived in great towns among forests where we found snow again in dirty, hollow-flanked drifts, that were giving up all the rubbish and refuse that winter had hidden. Labour battalions dealt with the

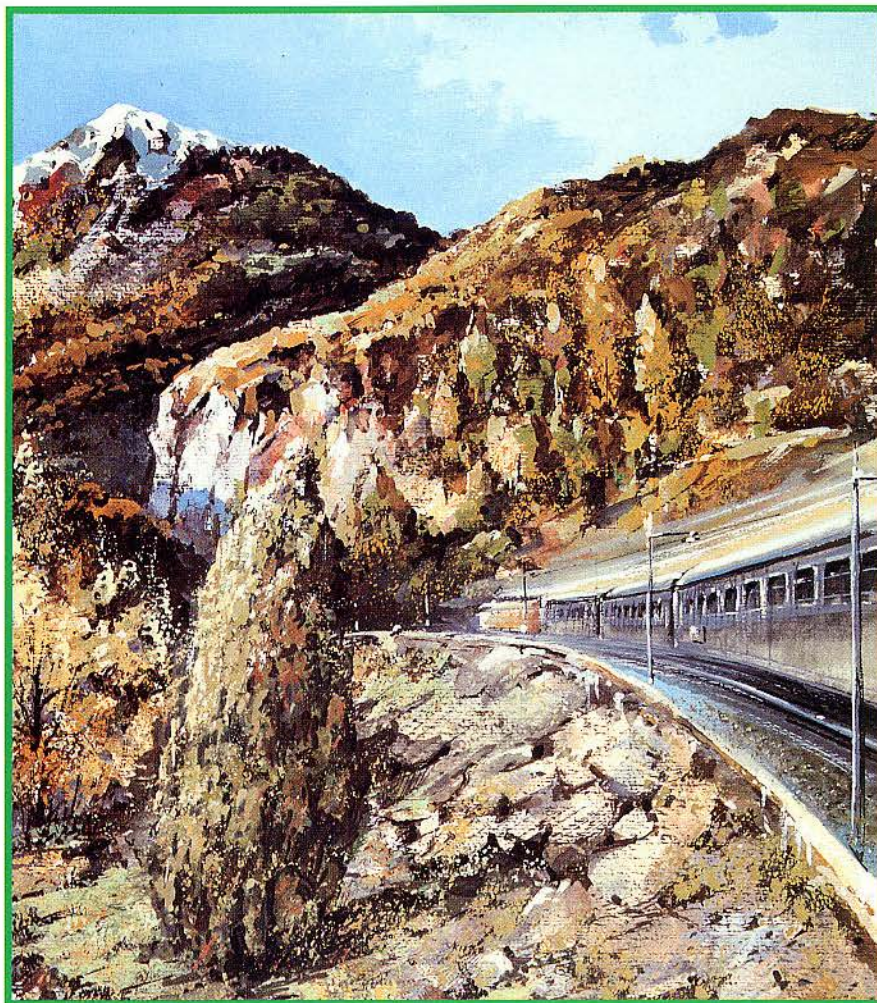
stuff, and there were no smells. Other gangs mended shell-holes with speed; the lorries do not like being checked.

Another township, founded among stones, stood empty except for the cooks and a bored road-mender or two. The population was up the hill digging and blasting; or in wooded park-like hollows of lowland. Battalions slipped like shadows through the mists between the pines. When we reached the edge of everything, there was, as usual, nothing whatever, except upturned breadths of grass and an 'unhealthy' house — the battered core of what had once been human — with rain-water dripping through the starred ceilings. The view from it included the sight of the Austrian trenches on pale slopes and the noise of Austrian guns — not lazy ones this time, but eager, querulous, almost questioning.

There was no reply from our side. 'If they want to find out anything, they can come and look,' said the officer.

One speculated how much the men behind those guns would have given for a seat in the car through the next few hours that took us along yet another veiled line of arms. But perhaps by now the Austrians have learned.

The mist thickened around us, and the far shoulders of mountains, and suddenly-seen masses of men who loomed out of it and were gone. We headed upwards till mists met the clouds, by a steeper road than any we had used before. It ended in a rock gallery



where immense guns, set to a certain point when a certain hour should come, waited in the dark.

'Mind how you walk! It's rather a sharp turn there.'

The gallery came out on a naked space, and a vertical drop of hundreds of feet of striated rock tufted with heath in bloom. At the wall-foot the actual mountain, hardly less steep, began, and, far below that again, flared outward till it became more reasonable slopes, descending in shoulders and knolls to the immense and ancient plains four thousand feet below.

The mists obscured the northern views, but to the southward one traced the courses of broad rivers, the thin shadow of aqueducts, and the piled outlines of city after city whose single past was worth more than the future of all the barbarians clamouring behind the ranges that were pointed out to us through the observatory windows. The officer finished his tales of year-long battles and bombardments among them.

'And that nick in the skyline to the right of that smooth crest under the clouds is a mine we sprung,' said he.

The observation shutter behind its fringe of heather-bells closed softly. They do

everything without noise in this hard and silent land.

The New Italy

Setting aside the incredible labour of every phase of the Italian war, it is this hardness that impresses me at every turn — from the Stripped austerity of general Cadorna's headquarters, which might be a monastery or a laboratory, down to the wayside muleteer, white with dust, but not a bead of sweat on him, working the ladder-like mountain trails behind his animal, or the single sentry lying-out like a panther pressed against a hump of rock, and still as the stone except for his shadowed eyes. There is no pomp, parade, or gallery play anywhere, nor even, as far as can be seen, a desire to turn the best side of things to the light. 'Here,' everybody seems to imply, 'is the work we do. Here are the men and the mechanisms we use. Draw your own conclusions.' No one is hurried or over-pressed, and the 'excitable Latin' of the Boche legend does not appear. One finds, instead, a balanced and elastic system, served by passionate devotion, which saves and spares in the smallest details

as wisely and with as broad a view as it drenches the necessary position with the blood of twenty thousand men.

Yet it is not inhuman nor oppressive, nor does it claim to be holy. It works as the Italian, or the knife, works — smoothly and quietly, up to the hilt, maybe. The natural temperateness and open-air existence of the people, their strict training in economy, and their readiness to stake life lightly on personal issues have evolved this system or, maybe, their secular instinct for administration had been reborn under the sword.

When one considers the whole massed scheme of their work one leans to the first opinion; when one looks at the faces of their generals, chiselled out by war to the very cameos of their ancestors under the Roman eagles, one inclines to the second.

Italy, too, has a larger number than most countries of men returned from money-getting in the western republics, who have settled down at home again. (They are called *Americanos*. They have used the new world, but love the old.) There is a curiously spread influence which, working upon the national quickness of mind and art, makes, I should imagine, for invention and faculty. Add to this the consciousness of the New Italy created by its own immense efforts and necessities — a thing as impossible as dawn to express in words or to miss in the air — and one begins to understand what sort of future is opening for this oldest and youngest among the nations. With thrift, valour, temperance, and an idea, one goes far.

They are fighting now, as all civilisation fights, against the essential devildom on the Boche, which they know better than we do in England, because they were once his ally.

To that end they give, not wasting or sparing, the whole of their endeavour. But they are under no illusions as to guarantees of safety necessary after the War, without which their own existence cannot be secured. They fight for these also, because, like the French, they are logical and face facts to the end.

Their difficulties, general and particular, are many. But Italy accepts these burdens and others in just the same spirit as she accepts the cave-riddled plateaux, the mountains, the unstable snows and rocks and the inconceivable toil that they impose upon her arms. They are hard, but she is harder.

Yet, what man can set out to judge anything? In an hotel waiting for a midnight train, an officer was speaking of some of d'Annunzio's poetry that has literally helped to move mountains in this war. He explained an allusion in it by a quotation from Dante. An old porter, waiting for our luggage, dozed crumpled up in a chair by the veranda. As he caught the long swing of the verse, his eyes opened! His chin came out of his shirt-front, till he sat like a little hawk on a perch, attentive to each line, his foot softly following its cadence.

THE BATTLE OF MARIGNANO



More than four and a half centuries have passed since that remote September of 1515: a remarkable length of time if measured with the historic metre to which we have been accustomed until lately: an immensity in an epoch like ours during which the peculiar acceleration impressed on events by the rapid social, economic and technologic development, quickly buries men and things into oblivion.

Yet, despite all this, the above battle, like many others, still maintains a particular fascination and interest for who, beyond the mechanic flow of facts, manages to re-live the sentiments and thoughts of the main characters, interprets facts, their causes and their consequences, re-establishes a contact with the characters who indelibly marked — and nowadays we may still feel their influence on our language and custom — the history of our Country.

Let us thus go back to Marignano: we will realise with surprise how those dramatic days are still rich in teachings and portending valid considerations.

THE GENERAL POLITICAL BACKGROUND

To depict the general political background we must go back to the second half of the XV century, when the Peace of Lodi (1454), putting an end to the war of succession against the Duchy of Milan, stopped the conflict among Florence, Milan and Venice which had torn the peninsula to pieces for half a century. As a result of this peace, Francis Sforza was legitimized Signore of Milan, Venice extended its dominion to the Ad-da river while Alfonso of Aragon was recognized Signore of Naples.

A political balance was thus reached destined to last till the death of Lorenzo the Magnificent; the latter event was of the utmost importance and gave rise to the wars for predominance in Italy and, in particular, the forthcoming descents into Italy of Charles VIII, Louis XII and Francis I.

The question is how and when, towards the end of the XV century, did the French throw an eye beyond the Alps? Unfortunately, the reply to this question involves, according to many historians (1), the enormous responsibility of a member of the Sforza family, that is Ludovic the Moor.

Let us summarize the facts. When Francis Sforza, founder of the family, died in 1466, his son, Galeazzo Maria, became his successor. In 1476, the latter was a victim of the conspiracy of a man of letters, Cola Montano, who, posing as brutus and probably mindful of the glorious deeds of the Republic of Milan, expected to free the duchy from the tyrant (2).

Gian Galeazzo, son of the murdered duke, was now the natural heir to the throne; due to his very young age, he started reigning under the regency of his mother, Bona of Savoia, advised and guided by a very shrewed minister, Cicco Simonetta.

Galeazzo Maria's brother, Ludovic the Moor, was not pleased with the situation and from the very start tried to mortgage the duchy, achieving power in successive stages and without worrying too much about the means and methods used: in fact, in 1480, he succeeded in being appointed tutor of the young boy, sentenced Cicco Simonetta to death and had him beheaded, estranged his sister-in law banishing her to a small town of Piedmont and finally deported his nephew to the Castle of Pavia where, in 1494 he had him poisoned.

"Typical gentleman of the Renaissance, both refined and wicked, a lover of beautiful things and of art, patron of artists and scholars, bus also capable of deceit and evil as was customary of a time in



Francis I, the young French King who, after the victory in the Marignano battle, was called «Primus domitor Helvetiorum».

which, refinement in art and a life of elegance, one could find in the soul of men skepticism, immorality and exaggerated taste for worldly pleasures, irreligiosity."

(3) This was Ludovic the Moor, whose unprejudiced escalation for power could certainly not go unobserved.

The first reactions were felt in Naples. The dethroned (and later assassinated) Gian Galeazzo had, in fact, married a niece of Ferdinand I, Isabel of Aragon. The Neapolitan King's desire to drive out the usurper and re-establish order and right was thus more than legitimate.

The Moor, fearing the French whose claims on the Duchy of Milan had appeased, but not altogether vanished (4), saw no better than draw Charles VIII's attention on the South of the Peninsula, begging him to enforce his rights as successor of the Angioini. Thus, the machiavellian duke expected to achieve two results in one go; divert the French interests from Milan and eliminate or, at least, make trouble for the Neapolitan enemy.

The Monarch who had meanwhile consolidated his power in France, was quickly persuaded and in 1494 made his entrance into the peninsula. Among the Italian princes, his presence caused various and different reactions. In Piedmont he was welcomed by the duchess Bianca of Savoia, he was (obviously) acclaimed by the Moor and Piero dei Medici's welcome was encouraging. However, the people of Florence, Pope Alexander IV Borgia, rather suspicious, and of course the Kingdom of Naples reacted in a very negative manner.

Despite these hostile manifestations, the first stage of Charles VIII's expedition proved an authentic walk which led him to conquer the Kingdom of Naples where he was greeted with all the honours, as always happens for the last liberator.

Soon, however, things changed; the easy French success had given rise to many reasons of worry both in the Italian States and in foreign ones which looked upon Italy with interest.

Thus in 1495 an "antiFrench League" was established in which Ludovic the Moor, Venice, the Pope, the King of Spain and even the emperor Maximilian I participated.

Charles VIII, fearing that his return might be precluded, hastened back. In Fornovo, though with great difficulty, he succeeded in opening a passage and returning to France where he died in 1499.

His successor, Louis XII, soon followed his policy of expansion, though with greater ambitions (in fact he was interested both in the Duchy of Milan and the Kingdom of Naples) and with a wider and more concrete strategic view made him obtain the alliance of Venice and the Pope before passing the Alps. Thus, in 1499, the French Army, lead by the Milanese Gian Giacomo Trivulzio, broke into the duchy in which the Venetians too entered from the east. After various vicissitudes, the Sforza was definitely defeated in 1500 and thus disappeared from history at first and then, in 1508, from the world of the living.

The facts which followed were rather complicated and even a brief description would divert us from the road which takes us to Marignano.

It is sufficient to say that after a whirl of fleeting alliances and "temporary leagues" which saw the Italian princes fight each other with the helping hand of foreign countries, in 1511, in a fit of ante-litteram national pride, Pope Giulio II Della Rovere (an ingenious character, though extravagant and violent, a condottiere of the Renaissance more than a minister of the Church) gathered all Italians in the so-called "Lega Santa" in which, besides the Pope, Venice, Ferdinand the Catholic, Henry VIII and the Swiss also took part.

As usual, the French fought with great valour, obtaining a clamorous though expensive victory in Ravenna (in fact, the heroic Gastone Di Foix died); Louis XII was thus made to call his army back to France.

The following descent into Italy (1513) ended unfavourably in Novara, where the troops of Louis XII were defeated by the Swiss of Maximilian Sforza, son of the Moor.

In these stormy vicissitudes a character which we shall soon meet again started making his appearance: the bishop of Sion, Matteo Schiner, a man with a strong personality, rigid and austere, in whom Giulio II found a kind of "alter-ego" and with whom, consequently, he got on perfectly well.

In 1515 Louis XII died. His successor, cousin and son-in-law Francis I immediately took up the policy of expansion of his predecessors. That same year, after having formed an adequate army, he penetrated into Italy through the Argentera pass. We are on the eve of Marignano.



Pope Leo X with Cardinals Giulio de' Medici and Luigi de' Rossi
by Raphael (XVI century) - Florence Uffizi Gallery.

THE PARTICULAR SITUATION, THE MEN AND THE OPPOSING FORCES

When Francis I entered Italy, the situation showed on the one hand the King of France and Venice who wished to regain the Lombard possessions it had lost in 1513 and on the other hand the usual heterogeneous "anti French League" to which Maximilian Sforza, Pope Leo X, succeeded to Giulio II, the King of Spain Ferdinand the Catholic, the emperor of Austria Maximilian and the forces supplied by the Swiss Cantons all took part.

Let us give a closer look to these characters and their generals.

The young French king, contrary to his cousin Luois XII, was brave, daring, not very staid, somewhat fatuous, impulsive, ready to sacrifice everything for the sake

of the "beau geste". He had the attitude and the severe look of the master.

Clouet's painting depicts him rather differently, thoughtful and with an intense look in his eyes, but the reality was different: "Well seated in his saddle, erect, irreprehensible, large shoulders, long legs, he looked the typical French soldier; he knew how to handle, with a light and flexible wrist, a heavy lance or a sword, kill a hog or launch a falcon..." (5). According to Professor H. Bernard (6) he had an army of 25,000 knights, 48,000 men, 300 pieces of light artillery loaded onto quadrupeds, 72 heavy artillery pieces, equal to 5 pieces every 1000 men; on the battlefield the density of the artillery was equal to about 1 piece every 25 metres, a density never again reached till 1916.

Field-Marshal Gian Giacomo Trivulzio commanded these forces. He was a man from Milan who serviced the French in hatred of the Sforzas. Rather old, about seventy, his past had been rather agitated. He belonged to a big noble family and had a vivid intelligence and a great tactical sense, which he had fully made use of in Fornovo, in Agnadello against the Venetians and in Ravenna where, after the death of Gastone Di Foix, he took the command of the French army. The pick of the nobility serviced the French forces, such as Baiardo, Field Marshal La Palice, Lautrec, Bonnivet, Montmorency and Fleurange. In brief, a formidable army for both its moral and technical levels.

As already mentioned, the Serenissima Republic of Venice was allied with the French. Its forces included a great amount of cavalry and were commanded by Bartolomeo d'Alviano, one of the greatest Condottieri of the Renaissance.

Before being in the pay of the Pope and of the King of Naples, in 1503 he fought in the Napolitan region defeating the French at Garigliano. In 1507 he passed over to the Serenissima, which — thanks to its wealth and policy — could offer him excellent "working conditions". A capable soldier, he was however rather short-sighted politically speaking, contrary to his predecessor, Bartolomeo Colleoni.

We shall now mention briefly the men and forces of the anti French League.

We shall not spend too many words (we would need too many) to describe the personalities of Maximilian I, Leo XII and Ferdinand the Catholic. Only a brief summary of their main characteristics.

Maximilian I, of whom Dürer gives us an intense picture, rich in psychological penetration, was king of the Romans since 1486 and then, after the death of his father Frederick III, only ruler of the Austro-Hungarian domains. He was surely a fascinating and capable man, with the qualities and the charisma which make a king popular and loved. A great gentleman, courteous, excellent athlete, he excelled in tournaments and hunting; learned, poet, a patron of humanists and artists, good commander in war, organiser of the German Infantry, made by the famous Landsknechte, he was an artillery expert (7). Durant says of him: "It was as if an Italian Prince of the high Renaissance had ascended the throne of Germany".

His marriage policy proved particularly good. By marrying Maria di Borgogna, only daughter of Charles the Bold, he obtained the control of Flanders (Belgium and Holland). Then, by marrying his son, Philip the Fair, the only heir of Ferdinand of Aragon and Isabel of Castile, Joan the Mad, guaranteed his family the crown of that Country (this happened with his grand-son Charles V). By the same policy he succeeded in guaranteeing the thrones of Bohemia and Hungary to another two of his grand-sons.

Pope Leon X, in the world Giovanni de'

Medici, son of Lorenzo the Magnificent, was certainly one of the greatest gentlemen of the Italian Renaissance (8). Cardinal at the age of fourteen, he had grown up immersed in the Medicean society, of which he had absorbed the refined tastes, the elegance and misbelief. A pupil of Marsilio Ficino and Demetrio Calcondila, he had learnt, in the daily contact with the learned men of Florence, to love poetry, history, art, science, mathematics and astronomy. Elected Pope in 1513, he lavished huge richness in orders to famous artists, on the purchase of manuscripts, jewels, carpets, tapestry. A patron to men of letters, humanists and philosophers, he protected and encouraged them in their study, also establishing the University of Rome. Though he had an inclination for literature and art, Leo X did not neglect politics, aware as he was of the risks connected with a French or Spanish hegemony in Italy. In his passionate fondness of beauty, magnificence and opulence, he did not perceive the serious risk bound to the rise and strengthening of the reformist movement of which he may be considered ultimately responsible.

The above is his moral and intellectual image: for his physical portrait it is once more the painter (Raffaello in this case) who gives a hand to our imagination leaving us a very famous portrait of the Pope.

Ferdinand II of Aragon may rightly be considered the creator of the Spanish absolute monarchy; this job was completed in two fundamental stages: the marriage of Isabel of Castile which brought to the unification of the two kingdoms (1479), and the favourable conclusion of the war of Granada, ended with the defeat and flight to Morocco of the last Calif Boabdil (1492). Events of exceptional historic importance are bound to his name from the discovery of America to the ruthless and cynic Spanish inquisition and the great inquisitor Torquemada, from the strengthening of the central power to the persecution of Jews and Arabs which proved so harmful for Spanish economy. His interest in the peninsula, and more precisely in the Kingdom of Naples, goes back to the Peace of Blois (1504), by which the Kingdom had been acknowledged as belonging to Spain while the Duchy of Milan to France.

These three sovereigns, though belonging to the anti-French league, did not give a great contribution to the conflict. Worth of attention, a contingent of Napolitan-Spanish troops commanded by Raimondo Cardone and a papal army which, under the Duke of Urbino, Francesco Maria Della Rovere, soon lost his Commander who had passed to the enemy as soon as possible.

The forces supplied by the Swiss Cantons completed the anti-French coalition; it is here necessary to give some details due to the remarkable importance of these battle-trained contingents in the European disputes of the early XVI century. Switzerland had reached its independence

between the XIV and XV century detaching itself from the Hapsburgs, defeated several times (Morgarten 1315, Sempach 1386 and Näfels 1389) by the representatives of the Communities of Schwyz, Uri and Unterwalden and of other five Cantons (Zuc, Glarona, Berne, Lucerne and Zurich).

In the second half of the fifteenth century, the young State, became an ally of France and Louis XI against the Bold, Duke of Borgogna, who was repeatedly defeated in the battles of Grandson and Murten (1476) and, definitely, at Nancy (1477).

Proud people, therefore, jealous of their freedom; extremely valid in the military field and, very important, ready to put these unique natural gifts at the service of the best offerer. This is how Guicciardini speaks of them: "Men fierce by nature, rustic and, due to the barrenness of their Country, shepherds more than farmers... The name of these people, so horrid and uneducated, has become famous through the union and the glory of the arms with which, for their natural ferocity and the discipline of their regulations, they not only have always bravely defended their own Country, but have practised the military art with *somma laude* outside their Country as well" (9).

In the "History of the modern world" by the Cambridge University Press we read as follows: "In a period in which we passed from a feudal type army to a professional type army, from the heroism of a mounted soldier to the supremacy of the new weapons, the disciplined military valour of the Swiss permitted them to make of war a national industry." To the rather modest incomes of trade and cattle rearing "...they added, the pay and booty obtained fighting as mercenaries abroad, an activity much appreciated, by the young especially."

Of course, the race for mercenary service was encouraged by the foreign Princes, particularly by the Italians, totally unwarlike. thus, it is not surprising that these soldiers, valid, but also venal and greedy, were engaged several times, even fought one against the other and formed, on the eve of Marignano the nucleus of Maximilian Sforza's army reaching about 30,000 in number. They were commanded by Matteo Schiner already mentioned above. The latter, with his passionate and fascinating eloquence, was the only man capable of keeping together forces subject to centrifugal impulse and ready to give up the fight.

WEAPONS

Brief mention must be made of the weapons with which the armies were equipped.

French artillery was known for being modern and efficient. In particular, the commander of the French artillery, Jacques de Genouillac, had, as mentioned above, 72 pieces fused in bronze, drawn by horses,



The terrain as it was at the time of the battle.

with a good firing speed and a tactic mobility equal to that of the Infantry.

The introduction of the wheeled gun was an important innovation together with the trunnion for the inclination of guns and iron cannon-balls instead of the old stone ones.

As regards employment, the pieces were deployed in a uniform and linear way and their intervention consisted essentially in shots aimed at causing disturbance. Seven or eight pieces were generally concentrated together and enfiladed or the enemy was surprised from the back.

Infantry consisted of, on both sides, pikemen and arquebusiers. The only difference between Swiss pikemen and Landsknechte (they were about 800 among the troops of Francis I) was in the way of grasping the pike: the former grasped it at the centre and held it slightly turned towards the bottom, the latter grasped it towards the bottom and turned it towards the top.

At the start of the war in Italy the individual firing weapon had greatly improved as regards the time of its birth. During the Hundred Years' War two men were needed to move the weapon, whereas now its weight had been reduced by about 13 Kilos and could be transported single-handed. The barrel was about one metre long and the calibre had been diminished to the great advantage of the firing range and accuracy.

The most radical change, however, proved the introduction of "coil". Before this, firing was carried out by applying a lit

fuse to the weapon. As this, however, had to be held by two, the shooting soldier — as Montgomery notes quite cleverly (10) — should have had three hands and three eyes and this was far beyond his possibilities, no matter how physically gifted he was.

The problem was solved with a device (the "coil") formed by a metal lever hinged onto the centre, an end of which was connected to the trigger while the other end carried the fuse. Pressure on the trigger was enough to bring the fire close to the launching charge and fire. Results, however, always depended on the aim of the rifleman.

Lastly, cavalry had become of the utmost importance. After a century of disastrous tactics on foot, it had again taken up its determining role.

THE BATTLE

We have already seen that as soon as Francis I ascended the throne he immediately thought of regaining the possession of Lombardy.

Supposing that the French king wished to pass by the Susa Valley, the Swiss prepared an ambush at the foot of Moncenisio and Monginevro.

In March, however, Trivulzio had carried out a reconnaissance in the Dauphine and discovered another pass, the Argentera (the Maddalena Hill). The hardships of the route did not discourage the French who soon found themselves at the head of the river Po where, in a secluded mountain village, they took prisoner the commander of the Pope's troops, Prospero Colonna,

without meeting any resistance.

Thus, while the Swiss with their pikes, waited for the French in the north, the latter spread south towards Milan. The Swiss then retreated in great haste towards the capital of Lombardy swearing against their bad luck.

The French army went on quickly towards Carmagnola, Turin, Chivasso and Vercelli and soon occupied all the Duchy of Milan on the north side of the river Po.

Meanwhile Bartolomeo d'Alviano who had settled in Lodi with his Venetians, kept in observation 20,000 Spaniards and Napolitans camped in Piacenza.

In this situation, Francis I tried to buy the retreat of the Swiss to avoid the horrors of a siege in Milan. Negotiations did not seem particularly difficult. In fact, the Swiss had not obtained the pay that had been promised them, were dissatisfied and rather indifferent to Matteo Schiner's inflamed sermons to which they opposed the phrase "no money, no Swiss" (11) showing a sure lack of idealism and just as sure a sense of reality.

In fact, at the start things went quite well for Francis. Through the mediation of the Duke of Savoia a conclusion was reached, at least with the more cautious Swiss: if Francis paid them before the king of Spain, they would have returned home.

In all haste, Francis gathered one hundred and fifty thousand crowns and sent them to Gallarate where Renato of Savoia, with the help of the French man Lautrec, was working on an agreement. However, as this had to be ratified, Francis remained uncertain on the intention of the enemy until 12 September, the day of his 21st birthday.

Moreover, the papal forces with their new commander (the third), Lorenzo de' Medici — nephew to the Pope — had joined the Spanish-Napolitan army of Cardone.

In this situation (see sketch No. 1) Trivulzio positioned between Milan and Melegnano, thus putting himself between the Swiss and the Spaniards and in a position to operate from within and give or obtain support from the Venetians of the Alviano.

The French forces were deployed as follows on the right bank of the Vettabia, small affluent of the Lambro river:

- on the front line, the mass of Landsknechte settled on the right and left of the Milano-Melegnano road (L); on their right French and Gascon bands (G), on the left, a part of the police force (G);
- at the centre, the king's household and the remaining police force, at the back, the artillery which Genouillac had deployed on the right bank of the Vettabia;
- on the second line, the other Landsknechte watched over the wagons.

At three o'clock of the 13th the king was informed that 24,000 Swiss with 8 guns had left Milan guided by Matteo Schiner and moved in three columns towards the royal camp. The prelate, in fact, had made a last, successful appeal, mentioning Novara and despising the enemy, making fun of the latter's difficult position among ditches and canals, laughing at the enemy's effeminacy, praising the male bravery of the Swiss and prospecting the glory and advantages of a victory already at hand. (12) The three columns were formed as follows: (13)

- to the centre the forces of Uri (Imhof and Puntiner), those of Schwytz (Koetzi and Fleckle), of Unterwalden (Fluenz), Zug (Schwarzmueller), Glarona (Tschudi), and Grisons (Salis);
- to the right, forces of Zurich (Roist) and Sciaffuse (Ziegler);
- to the left, Lucerne (Hertenstein) and Vaud (Offenburg and Meltinger);
- in the advanced guard, 500 volunteers from Zug (Werner-Stein).

Marching regularly and on a restrained front, this powerful army destroyed everything it found on its way.

When the battle started the sun had set and visibility began to abate.

Suddenly the Swiss columns annihilated the enemy's advanced guard; the central guard broke down on the French artillery capturing seven pieces and was arrested only by a reckless cavalry charge. Artillery fired furiously and, together with the cavalry, arrested the right and left columns. Combat continued ruthlessly till dark. During the night no one slept: the French retreated their formation and joined their artillery in a single maxibattery which, at dawn, started firing again.

The central column of the Swiss, careless of the casualties suffered, began attacking again; the left column resisted the charges of the French cavalry while the right column, sweeping away all resistance,

thrust itself straight onto the wagons.

Just as it seemed that the Swiss were close to victory, the troops of Alviano arrived and by a favourable initiative, overthrew the outcome of the battle. After a combat in which their legendary heroism shone once more, the Swiss withdrew in orderly manner while the victors too were at the end of their strength.

Thus ended what Trivulzio defined the "Battle of the Giants". According to the legend Francis I, in admiration, gave orders to respect the glorious defeated; the truth, however, is that the victors started chasing the dispersed, killing them ruthlessly. Three hundred soldiers from Zurich had taken refuge in a convent at Saint Giuliano. Cannons were fired against them and as they resisted everything and everyone, they were burnt together with the convent building.

Those who died at Marignano were never counted and there is some disagreement as to the figures: it seems, however, that twelve thousand Swiss and six thousand Frenchmen died on the battlefield and it is certain that for decades the plain was disseminated with bones. Most of the survivors passed the Alps again while two thousand men remained in Milan and kept possession of the Castle for another month. On October 11, Francis I made his triumphant entrance in Milan: on the occasion, a coin was minted in which the French king was proudly defined "Primus domitor Helvetiorum", the first to have tamed the Swiss.

The peace of Bologna (1515) and of Noyon (1516) sanctioned the French possession of the Duchy of Milan, Venice regained its lands in Lombardy while Francis I acknowledged the Spanish dominion over the south of Italy.

Thus concluded a stage of the wars of predominance in Italy, others, equally dramatic, followed and involved people and dynasties till the Peace of Cateau Cambrésis (1559) ended the fight for the Households of France and Hapsburg, finally guaranteeing the Spanish hegemony in Italy and in Europe.

CONSIDERATIONS AND TEACHINGS

Nowadays, the panorama of the area has changed completely. Where the opposing armies fought furiously and with alternate fortune in swamps and marshlands, we now see the fertile and green plain of Lombardy dotted by thousands of inhabited areas. However, even if time has changed the face of things, a careful survey (sketch No. 2) allows us to see the course of the Vettabia, now canalized, the bends of the canal where the adversaries met face to face.

With our imagination and our knowledge of the facts we may again live those two epic days and re-establish the whole picture of that far-away event, drawing information and relative teachings.

Politically speaking, history has already given its final opinion. During the Renaissance period there was in Italy and later in Europe a true and proper explosion of genius, such as mankind had not known since Pericle's Greece and would never know in future. Master in all sectors of learning and art, Italy was extremely poor as regards politics. Machiavelli's brilliant, but cynic and despairing picture bears witness to the above, particularly those chapters which the Florentine secretary devotes to the influence of mercenariness on the military and civic virtues of Italians and the great danger of turning to foreigners for the solution of domestic disputes.

In fact, in chapter XIII of "Il Principe" Machiavelli says: "Auxiliary weapons... that is when a powerful nation is called to help and defend... These weapons may be good and useful themselves, but for he who calls them they are almost always harmful; because, if you lose, you are defeated; if you win, you are their prisoner."

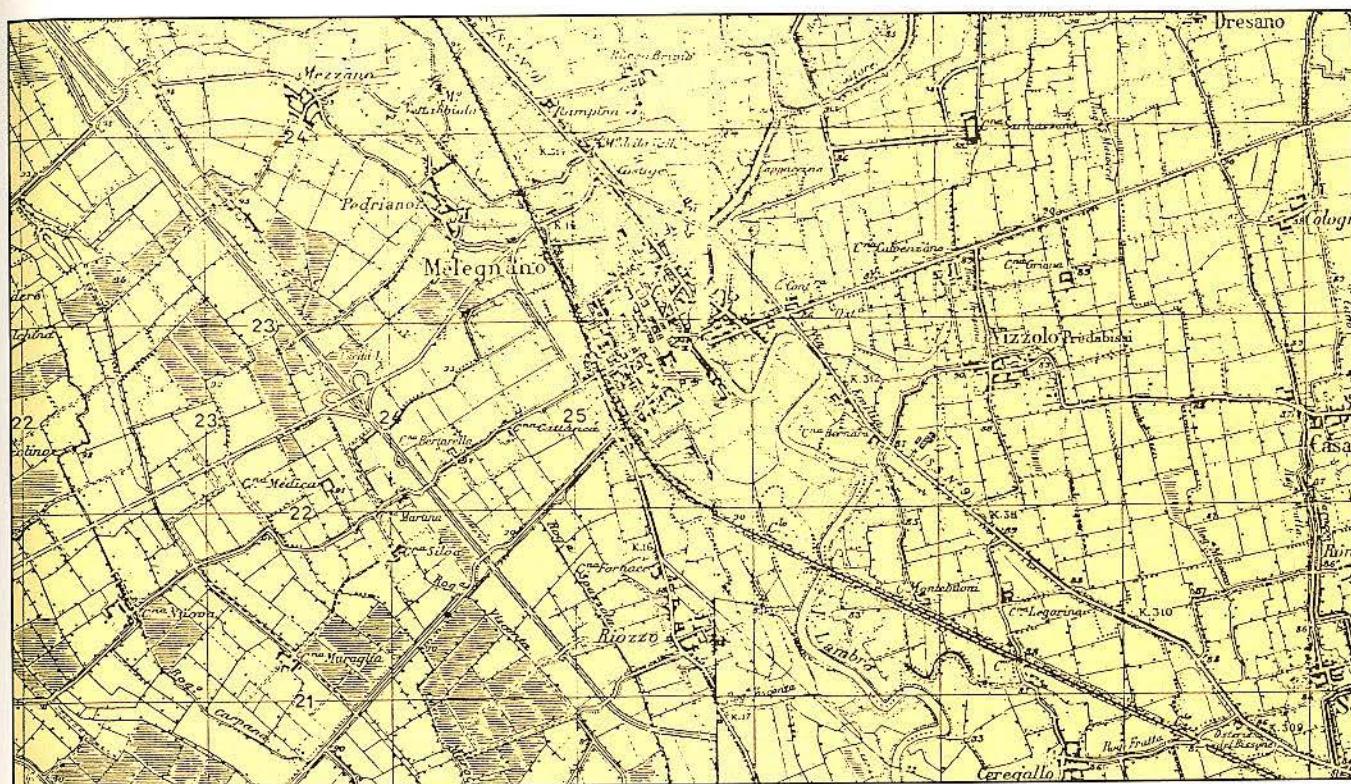
And further (chapter XII): "...the arms with which a prince defends his State, they are either his or are mercenary... and if one keeps his State based on mercenaries, it will neither be still nor safe; because the latter are at variance, ambitious, without discipline, unfaithful... the ruin of Italy is caused by no other reason than that of having counted for many years on mercenaries. These were considered an improvement by some and seemed vigorous; but as soon as the foreigner arrived, they showed themselves for what they were..." In conclusion, says Machiavelli, defence cannot be entrusted to anyone: it is a right/duty of a people in its whole of which all people must be aware, with the certainty that one cannot be a good soldier if one is not a good citizen and vice-versa: these teachings are still valid nowadays and it would not be superfluous to meditate on them with the suitable, obvious and necessary adaptations.

From a purely tactical point of view, the battle of Marignano is surprisingly interesting. Let us observe it closely from a modern point of view.

May the French action of the first day be somehow considered a sort of dynamic opposition designed to absorb in depth the offensive thrust of the Swiss and create the basis for a direct reaction on the open flank of the enemy? Further, does not Alviano's intervention have the decisive characteristics of a counter-attack carried out with the mass of the mobile forces against an enemy previously worn out and blocked?

Even if means are completely different, just as completely different are self-efficiency and firing range, the basic ideas, or part of them at least, seem to have preserved a permanent validity.

Morally speaking, the behaviour of combatants still arouses surprise and admiration.



The terrain as it is today.

How else could we judge the Swiss who, after the first bloody day, spent their night in the cold, drenched with rain and mud, without food or drinking water, unable to light a fire in case the French artillery reacted? Despite all this "they decided to remain on the battlefield to maintain the advantages obtained in battle while the ghostly sound of the Uri horns called in the darkness to encourage the despaired and admonish whoever might attempt escape." (14) These were the men who, the following day, careless of fatigue and dangers, again took up the fight, desperately, to the extreme of their strength: an example of bravery, superhuman will-power, firmness and strength of character.

And what about the twenty year old king of France? He was fire struck several times and during the night he slept on a gun carriage, in his armour, under a veiled moon. The following day he threw himself in the fight, risking everything, his kingdom and his very life, to guide his men to victory. Is he not an example of how command should be understood? A charisma and fascinating strength, invigorated by the force of example and capacity. Furthermore, how are we to judge Gerolamo d'Alviano's extraordinary, lucid and decisive initiative, ready as he was to grasp the most suitable time and place to intervene in the battle and decide of its outcome?

There would still be a lot to say on Schiner, La Palice, Baiardo, Trivulzio, Bon-

nivet and Fleurange, but the reader who has patiently followed us to here has the right not to be further bored.

It is likely, however, that this summary of an epoch and of an episode, besides recalling forgotten memories, has succeeded in reaching the aim it has been written for: prove how useful and formative the teachings of history may be and what noble and divine, but also fleeting and unavowable things mankind is capable of doing.

General Sergio Onnis

Note

(1) Other historians do not share the thesis of the "individual responsibility". These see in the antisocial and anti-popular policy of the princes the main cause of the catastrophe (See: Franco Catalano "Lodovico il Moro" pag. 154 and following, Editor: Dall'Oglio).

(2) The actual executors of the murder were Giacomo Olgiati, Carlo Visconti and Andrea Lampugnano, disciples of Cola Montano.

(3) Georg Thürer — Guido Calgari "MARIGNANO, turning point in the Swiss policy" Zurich 1965, pag. 20.

(4) Valentina Visconti, sister of Filippo Maria Visconti, last Duke of the family, had

married the Duke of Orleans. The will of Gian Galeazzo Visconti, Valentina's father, stated that, if the Visconti family should become extinct (as actually happened), the Duchy should pass to the Orleans.

(5) Francis Hackett: "Francis I" Published by Dall'Oglio pag. 12.

(6) See: H. Bernard "La guerre et son évolution à travers les siècles" Published 1955 Volume I: "Les principes et les règles de l'art militaire".

(7) See: "Storia del mondo moderno" Volume I. "Il Rinascimento", by Cambridge University Press published by Garzanti.

(8) For a description of the personality of Leo X I availed myself of the portrait made by I. Montanelli and R. Gervaso in "L'Italia della Controriforma" published by Rizzoli page 78 and following.

(9) F. Guicciardini, "Storia d'Italia", book X chapter VIII.

(10) Field-Marshal Montgomery — "Storia delle Guerre" published by Rizzoli.

(11) This sentence is still used in certain areas of Lombardy to underline the inadequacy of financial means compared to ambitions.

(12) See: Francis Hackett "Francesco I" published by Dell'Oglio pg. 161.

(13) Publisher F. Leconte "Etudes d'histoire militaire" Lausanne 1870.

(14) Georg Thürer and Guido Calgari: "Marignano: fatale svolta politica svizzera" Zurich 1965 pag. 38.

THE BATTLE OF MARIGNANO



ENGLISH ITALIAN

GLOSSARY



C3

cache, s.

to cache, v.t.

cadet, s.

cadre, s.

c. exercise

cage, s.

prisoner of war **cage**

caisson, s.

calibre, s.

call, s.

c. sign

c. up

c. word

bugle **c.**

collective **c.**

on **c.**

roll **c.**

sick **c.**

telephone **c.**

to call, v.t.i.

to c. for fire

to c. to order

to c. to arms

to c. to a halt

comando, controllo e comunicazioni (di una missione)

nascondiglio (per munizioni, provviste)

nascondere (munizioni, provviste)

cadetto, allievo ufficiale

quadro (di ufficiali)

esercitazione coi quadri

recinto

recinto per prigionieri di guerra

cassonetto

calibro (di cannone)

chiamata, richiesta, adunata

nominativo di stazione

chiamata alle armi

nominativo di maglia

squillo di tromba

chiamata circolare

su richiesta

appello

richiesta di visita medica

to c. out

to c. up

camel corps, s.

camelry, s.

camouflage, s.

c. net

c. smock

c. unit

electronic **c.**

to camouflage, v.t.

c. detection

photography

camp, s.

to go to c.

to pitch a c.

c. bed

c. kettle

prisoner of war

branch **c.**

refugee **c.**

temporary **c.**

transit **c.**

to camp, v.t.i.

sfidare a duello, chiamare truppe in aiuto

richiamare, chiamare al telefono

corpo di meharisti

compagnia di meharisti

mascheramento, mimetizzazione

rete mimetica

tuta mimetica

unità mascheratori

mascheramento elettronico

mascherare, mimetizzare

fotografia anti-mimetizzazione

campo, accampamento

andare al campo

impiantare un accampamento

letto da campo, branda

marmitta

campo ausiliario per prigionieri di guerra

campo profughi

campo di sosta temporanea

campo temporaneo di transito

accampare (truppe), accamparsi, attendarsi, dormire all'addiaccio.

c. striking force
aircraft c.
air group c.
armoured personnel c.

belt c.
escort c.
troop c.

weapon c.
carry, s.
carrying, s.

to cart, v.t.
cartage, s.
cartel, s.

carton, s.

cartouche, s.
cartridge, s.
armour piercing c.

armour piercing incendiary c.
ball c.

blank c.
cartridge belt

c. case
drill c.
dummy c.
c. pouch
rifle grenade c.

rocket c.
spotter c.

tracer c.

to fire blank c.
case, s.
cartridge c.
packing c.
pistol c.
powder c.
casemate, s.
to cashier, v.t.
to cast, v.t.i.
castellated, ag.

castrametation, s.

casualty, s.

c. analysis

c. assistance calls officer
c. assistance calls programme
c. branch

forza d'attacco portaerei
portaerei
trasporto stormo aereo
mezzo blindato per trasporto personale
trasportatore a nastro
portaerei di scorta
mezzo per trasporto truppe
mezzo per trasporto armi
portata (di fucile)
espugnazione (di fortezza)
trasportatore con carro
trasporto con carri
accordo per lo scambio di prigionieri
centro bianco (di bersaglio)
cartuccia
cartuccia
cartuccia a pallottola perforante
cartuccia a pallottola perforante incendiaria
cartuccia ordinaria (a pallottola)
cartuccia a salve
cartuccera, caricatore a nastro
bossolo (di cartuccia)
cartuccia da esercitazione
cartuccia finta
giberna
cartuccia per lancio di bombe da fucile
cartuccia tracciante
cartuccia da aggiustamento
cartuccia a pallottola tracciante
sparare a salve
custodia, cassa, fondina
bossolo di cartuccia
cassa da imballaggio
fodero di rivoltella
bossolo
casamatta
destituire, degradare
riformare (soldati, cavalli)
turrito, luogo ricco di castelli fortificati (archeol. mil.)
castrametazione
morto, ferito, pl. vittime, perdite (di uomini)
analisi dei caduti (per determinare l'efficacia del sistema d'arma)
ufficiale addetto alla assistenza ai feriti
programma di assistenza ai feriti
ufficio addetto ai caduti

c. evacuation
c. list
c. report

c. ward
the list of c.s.
catapult, s.

to catapult, v.t.
caterpillar, s.

caution, s.
c. area
cavalry, s.
c. squadron
sky c.
cavalryman, s.
to cease, v.t.i.

to c. fire
to c. firing
c. fire line
c. check firing
to c. loading
to ceil, v.t.i.

ceiling, s.

cell, s.

c. chief

central, ag.
c. analysis team

c. board of conscientious objectors
c. planning team

centralization, s.

to centralize, v.t.i.

centralized, ag.
c. control
centre, s.
Air Control C. (ACC)
Airlift Coordination C. (ALCC)
Air Support Operation C. (ASOC)
Allied Press Information C. (APIC)
Antiaircraft Artillery Operations C. (AAOC)
Captured document C. (CDC)
c. of burst
c. of gravity

sgombero feriti
elenco delle perdite
rapporto sui feriti ed i caduti
pronto soccorso
la lista delle vittime
catapulta, fionda (a forcella)
catapultare
caterpillar, mezzo cingolato
cautela
zona di restrizioni al volo
cavalleria
squadrone di cavalleria
cavalleria del cielo
soldato di cavalleria
cessare, desistere, finire, fermarsi
cessare il fuoco
smettere di sparare
linea del cessate il fuoco
riprendere il fuoco
cessare il caricamento
volare alla quota di tangenza
quota di tangenza, limite massimo
nucleo di combattimento, sezione di un Comando operativo
capo nucleo di combattimento, capo sezione
Comando operativo
centrale
gruppo d'analisi della direzione
comitato centrale per gli obiettori di coscienza
gruppo centrale di programmazione
accentramento, concentrazione di poteri, centralizzazione
accentrare, centralizzare, concentrare, concentrarsi
centralizzato
controllo centralizzato
centro
centro di controllo aereo
centro di coordinamento dell'aviotrasporto
centro operazioni di concorso aereo
centro informazioni
stampa alleato
centro operativo artiglieria contraerea
centro documenti catturati
punto di scoppio (di ordigno nucleare)
centro di gravità

c. of resistance	centro di resistenza	to issue a c.	lanciare una sfida
Communication C.	centro trasmissioni	c. and password	parola d'ordine e controparola
control and reporting C. (CRC)	centro di controllo e rapporto	to challenge, v.t.	sfidare a duello, intimare (di sentinella)
cryptocommunication c.	centro cifra	to c. someone to fight	sfidare qualcuno a combattere
detailed interrogation c.	centro di interrogatorio particolareggiato	chamber, s.	camera
fire direction c. (FDC)	centro di direzione del tiro	combustion c.	camera di combustione
Fire support coordination c. (FSCC)	centro di coordinamento del fuoco	firing c.	camera di scoppio
Joint air photo interpretation c. (JAPIC)	centro aereofotografico	ionization c.	camera di ionizzazione
Joint command operation c. (JCOC)	centro di comando operativo interforze	chambered, ag.	provvisto di camere, diviso in scomparti
joint coordination c. (JCC)	centro di coordinamento interforze	six c. revolver	rivoltella a sei colpi
joint operation c. (JOC)	centro operativo interforze	change, s.	cambio, variante, passaggio
light antiaircraft artillery control c. (LAAC)	centro di controllo dell'artiglieria contraerea leggera	c. of operational control (CHOP)	passaggio di controllo operativo
logistic coordination c. (Log. C.C.)	centro di coordinamento logistico	no c.	nessuna variante
message c.	centro messaggi	no c. of oral orders	nessuna variante agli ordini verbali
mobilization c.	centro di mobilitazione	changing, s.	cambio
movement control c. (MCC)	centro di controllo movimento	the c. of the guard	il cambio della guardia
movement control c. (MCC)	centro di controllo movimento	channel, s.	canale, via, pl. messi, vie di comunicazione
NBC control c.	centro di controllo NBC (nucleare, batteriologico chimico)	c. of communication	vie di comunicazione
NBC collection c.	centro di raccolta NBC	c. of diplomacy	le vie diplomatiche
Operation c.	centro operazioni	official c.	trafila burocratica
reception c.	centro di presentazione	c. of information	vie d'informazione
relay c.	centro di ritrasmissione	present c.	canale di frequenza predisposto
rescue coordination c. (RCC)	centro di coordinamento del soccorso	supply c.	canale di rifornimento
sector operation c. (SOC)	centro operativo del settore	chaplain, s.	cappellano
signal c.	centro trasmissioni	army c.	cappellano militare
sub-collection c. (NBC)	sottocentro di raccolta NBC	c. corps	corpo cappellani
tactical air control c. (TACC)	centro di controllo aereotattico	c. service	servizio di assistenza spirituale
certificate, s.	certificato, attestato	chaplaincy, s.	ufficio di cappellano
medical c.	certificato medico	charge, s.	carica, incarico
medical c. of the cause of death	certificato medico sulle cause della morte	base c.	carica fondamentale
cessation, s.	cessazione	bursting c.	carica di scoppio
c. of hostilities	cessazione delle ostilità	demolition c.	carica per demolizione
chain, s.	catena	explosive c.	carica esplosiva
c. armour	corazza, lorica a maglia	increment c.	carica aggiuntiva
c. of command	catena di comando, gerarchia	propelling c.	carica di lancio
c. of responsibility	catena di responsabilità	reduced c.	carica ridotta
c. reaction	reazione a catena	to return to the c.	tornare alla carica
c. shot	palle ramate, palle incatenate	to charge, v.t.i.	caricare (arma da fuoco), andare alla carica, approntare, incaricare
operational c. of command	catena operativa di comando	to c. a rifle	caricare un fucile
challenge, s.	sfida, intimidazione, il chi va là (della sentinella)	to c. a demolition	approntare una demolizione
		to c. with	dare un incarico, incaricare
		charger, s.	caricatore (di arma da fuoco)
		chariot, s.	carro, biga
		war c.	biga di combattimento
		chase, s.	caccia, inseguimento
		c. gun	i cannoni da caccia di una nave
		to chase, v.t.	cacciare, inseguire
		to c. the enemy	inseguire il nemico

chase, s.
chaser, s.

bow **c.**
stern **c.**
submarine **c.**
check, s.

to keep the enemy in **c.**
to meet with a **c.**
c. firing
cease **c.** firing
c. point

to **check**, v.t.i.

to **c.** an assault
to **c.** the enemy
to **c.** orders

Chelsea, no. pr.

Chelsea Royal Hospital

chemical, ag.
c. agent
c. ammunition
c. biological and
radiological operation
c. Corps (CHLC)

c. defence

c. mine
c. operation
c. Service
c. survey
c. warfare
c. warfare agent

c. weapon
chemistry, s.
nuclear **c.**
chevron, s.

chief, s.

c. of Army Staff

c. of chaplains
c. of combined
operations
c. of General Staff

c. of ordnance

c. of Staff (COFS)

volata (di arma da fuoco)
caccia, cacciatorpediniere, aereo di caccia
cannone di prua
cannone di poppa
cacciasommergibili
scacco, impedimento, ostacolo, controllo, verifica, messa a punto
tenere il nemico in scacco
subire uno scacco
sospendere il fuoco
riprendere il fuoco
posto di controllo, punto di inquadramento (artigl.)
impedire, ostacolare, fermare, controllare, verificare, mettere a punto, contenere
fermare un attacco
contenere il nemico
controllare gli ordini impartiti
Chelsea (quartiere di Londra)
ospizio per veterani ed invalidi di guerra (Londra)
chimico
aggressivo chimico
munizione chimica
operazione chimica, batteriologica e nucleare
Corpo del Servizio Chimico
difesa contro prodotti chimici
mina con agenti chimici
operazione chimica
Servizio chimico
ricognizione chimica
guerra chimica
prodotto di guerra chimica
arma chimica
chimica
chimica nucleare
gallone indicante il grado di sottoufficiale
capo, comandante, (arald) la sommità dello scudo
capo di Stato Maggiore dell'Esercito
ordinario militare
capo operazioni interarma
capo di Stato Maggiore della Difesa
capo dell'approvvigionamento
Capo di Stato Maggiore

c. of transportation
commander in **c.**
Joint commanders of Staff **c.**
message centre **c.**
chiefdom, s.
chiefship, s.
chimney, s.

chin, s.
c. strap

chivalry, s.

the flower of **c.**
choking, ag.
c. agent
c. gas
CIMIC support

cipher, s.

c. key
off-line **c.**
on line **c.**
to write in **c.**
ciphers, s.pl.

circle, s.
azimuth **c.**
aiming **c.**
damage **c.**
polar **c.**
circulation, s.
circuit traffic **c.**
circumvallation, s.
to **circumvent**, v.t.
to **c.** the enemy
citadel, s.
citation, s.

civil, ag.
c. affairs
c. affairs and military government
c. service
c. rights
c. works
c. defence
c. protection
c. war
civilian, ag. s.
c. preparedness for war

c. medical personnel
c. personnel management information system
c. substitution
c. war dead
Civil-Military Cooperation (CIMIC)

capo trasporti
comandante in capo
comitato dei capi di Stato Maggiore
capo centro messaggi
dignità, rango di capo
dignità di capo, autorità (alpinismo) cammino in roccia
mento
sottogola (di elmo, berretto)
(st.mil.) cavalleria, condotta cavalleresca
il fior fiore dei cavalieri
soffocante
aggressivo soffocante
gas soffocante
concorso di cooperazione Civile Militare
cifrario, messaggio
cifrato, scrittura convenzionale
chiave di cifrario
cifratura fuori linea
cifratura in linea
scrivere in cifra
unità delle trasmissioni addette alla cifratura e decifratura dei messaggi
cerchio, circolo
cerchio azimutale
cerchio di puntamento
cerchio dei danni
circolo polare
circolazione
circolazione ad anello
circonvallazione
ciruire, ingannare
ciruire il nemico
cittadella, fortezza, rocca
citazione, enumerazione (all'ordine del giorno)
civile
affari civili
affari civili e governo militare
amministrazione statale
diritti civili
protezione civile
difesa civile
protezione civile
guerra civile
civile, borghese
preparazione civile per la guerra in tempi di pace
personale medico civile
sistema informazioni sulla gestione del personale civile
sostituzione con civili
caduti di guerra civili
Cooperazione Civile-Militare

civil-military relations
claim, s.

to claim, v.t.i.

to c. damages

clandestine, ag.

c. operation

clash, s.

class, s.

c. of supplies

Military Load **C.** (MLC)
Army **c.**

c. of supplies

c. I (rations, forage,
post exchange supplies
consumed at an ap-
proximately uniform
daily rate under all
conditions)

c. II (clothing, equip-
ment and vehicles, in-
cluding spare parts)

c. III (fuels and
lubricants)

c. IV (fortification and
construction materials,
special machinery and
equipment and other
special supplies, as
well as additional
quantities of items
identical to those
authorized for initial
use)

c. V (ammunition of all
types, including
chemical, explosives,
mines, fuses,
detonators and
pyrotechnics)

to class, v.t.

not classed
classification, s.

bridge **c.**

route **c.**

security **c.**

c. restricted

c. confidential

c. secret

c. top secret

COSMIC top secret

unclassified

NATO **unc.**

statistical **c.** of
diseases, injuries and
causes of death

vehicle **c.**

relazioni civile-militare
richiesta, rivendicazione,
reclamo
reclamare, rivendicare,
esigere
chiedere il risarcimento
danni
clandestino
missione clandestina
scontro, conflitto, col-
lisione
classe, categoria
classi di rifornimento
classe dei carichi militari
contingente di leva
classi di rifornimento
classe I (razione viveri,
foraggio, altri materiali di
consumo giornaliero)

classe II (vestiario,
equipaggiamento e
veicoli, comprese le par-
ti di ricambio)
classe III (carburanti e
lubrificanti)

classe IV (materiali di
fortificazione e da
costruzione, macchinari
equipaggiamenti ed altri
materiali speciali; inoltre
materiali distribuiti in ag-
giunta a quelli di dota-
zione iniziale)

classe V (munizioni di
tutti i tipi (chimiche com-
prese), esplosivi,
spolette, detonatori e
materiale pirotecnico).

classificare
non classificato
classificazione,
classifica
classificazione ponti
classifica degli itinerari
classifica di sicurezza
riservato
riservatissimo
segreto
segretissimo
segretissimo NATO
non classificato
NATO non classificato
classificazione statistica
delle malattie, delle
ferite e delle cause di
morte
classificazione dei
veicoli

classified, ag.

c. document

c. material

c. matter

c. message

un-c.

cleaning, s.

c. rod

clear, ag.

the town is **c.** of the
enemy

all **c.**

clearance, s.

security **c.**

c. operation

c. hospital

field of fire **c.**

mine field **c.**

snow **c.**

clerk, s.

company **c.**

click, s.

to click, v.t.i.

to c. one's heels

climb, s.

c. corridor

to climb, v.t.i.

climber, s.

rock **c.**

climbing, ag.

aerial **c.**

c. flight

c. irons

c. with pegs only

exposed **c.**

free **c.**

mountain **c.**

roped **c.**

clip, s.

close, ag.

c. air support

c. combat

c. controlled air in-
terception

c. defensive fire

c. interdiction

c. support

classificato

documento classificato

materiale classificato

dati classificati

messaggio classificato

non classificato

pulizia, pulitura

scovolo per pulizia di
armi

chiaro, libero

la città è libera dal
nemico

segnale di cessato
allarme

autorizzazione, benesta-
re, autorizzazione all'ac-
cesso a documenti e ma-
teriali classificati

nulla osta di sicurezza
operazione di sgombero
ospedale da campo
sgombero del campo di
tiro

bonifica di un campo
minato

sgombero neve

scritturale

scritturale di compagnia,
aiutante furiere

scatto (del grilletto di un
fucile), dente di arresto
produrre un suono secco
battere i tacchi (nel
salutare)

ascensione

corridoio di ascensione
arrampicare, arrampicar-
si, salire, scalare

scalatore

rocciatore

rampicante, salita, scalata

salita aerea

volo ascendente

ramponi

arrampicata artificiale

arrampicata esposta

arrampicata libera

alpinismo

scalata in cordata

nastro (per armi a ripeti-
zione), caricatore

vicino, ravvicinato

appoggio aereo rav-
vicinato

combattimento rav-
vicinato, corpo a corpo

intercettatore aereo con-
trollato da vicino

fuoco a distanza rav-
vicinata

interdizione vicina

appoggio ravvicinato, ac-
compagnamento, appog-
gio

diretto

c. supporting fire

to close, v.t.i.

to c. ranks

to c. about an army
the enemy closed in
upon us
close up!

closed, ag.

c. area

closure, s.

c. minefield

to clothe, v.t.

clothed in armour

to c. with power

clothes, s. pl.

civilian c.

clothing, s.

anti-gas c.

c. and equipment

protective c.

cloud, s.

nuclear c.

clouding, s.

cluster, s.

clutter, s.

radar c.

coast, s.

c. defence

c. guard

c. line

c. waiter

c. watcher

c. watching

costal, ag.

c. artillery

c. convoy

c. navigation

c. refraction

c. route

coat, s.

c. armour

c. of arms

c. of mail

cock, s.

a gun at full c.

c. shot

c. shy

to cock, v.t.i.

to c. a gun

cock, s.

cockpit, s.

code, s.

fuoco di accompagnamento

chiudere, chiudersi, avvicinarsi, accerchiare
serrare le file
accerchiare un esercito
il nemico ci circondò

serrate le file!

chiuso

zona vietata

chiusura

campo minato di divieto
vestire, abbigliare,
rivestire

rivestito di armatura

investire di un potere

abiti, vestiti, indumenti

abiti civili

vestiario, indumento

vestito antipirritico

vestiario ed equipaggiamento

indumento protettivo

nuvola, nube

nube radioattiva

annabbamento

gruppo, grappolo (di bombe, mine, paracadute)

rumore, interferenza

interferenza radar

costa, riva, litorale

difesa costiera

polizia costiera

linea costiera

doganiere (per sorveglianza delle coste)

guardacoste

sorveglianza delle coste

costiero

artiglieria costiera

convoglio costiero

navigazione costiera

rifrazione costiera

rotta costiera

giacca, soprabito, cappotto, stemma, arme, blasone

stemma, blasone

arme, blasone ricamato sulla cotta

giaco

cane di fucile

un fucile armato

colpo al bersaglio

tiro al bersaglio

armare, alzare il cane di un fucile

armare un fucile

posizione eretta del cane di un fucile

carlinga, abitacolo

codice, regole, statuto, cifra, cifrario

ammunition identification c.

brevity c.

condensation c.

c. book

c. word exercise

c. name

c. number

c. word

Military C. of Justice

operation c.

unit designator c.

to code, v.t.

to codify, v.t.

coding, s.

cold, ag.

c. blooded

c. steel

c. war

collar, s.

coefficient, ag. s.

ballistic c.

friction c.

collaborationist, s.

to collect, v.t.i.

collecting station

collection, s.

c. agency

information c. plan

intelligence c. plan

NBC c.

college, s.

military c.

NATO Defence C.

naval c.

War C.

colonel, s.

lieutenant c.

colonelcy, s.

colonelship, s.

colour, s.

with the c.

to call someone to the

c.

c. bearer

c. sergeant

the national c.

regimental c.

column, s.

c. cover

c. formation

to march in two c.

c. gap

length of a c.

codice per l'identificazione delle munizioni
codice di abbreviazione
codice di abbreviazione
codice crittografico
parole convenzionali da esercitazione

nome convenzionale
prefisso

parola convenzionale

Codice Penale militare

codice operativo

codice indicativo di reparto

mettere in cifra, cifrare (un dispaccio), codificare

cifrare (un dispaccio)

codificazione, il cifrare

freddo

a sangue freddo

arma bianca

guerra fredda

bavero

coefficiente

coefficiente balistico

coefficiente di attrito

collaborazionista

raccogliere, ricercare

posto raccolta feriti

raccolta, ricerca

organo di ricerca

piano di ricerca informativa

piano generale delle informazioni

raccolta di dati NBC

collegio, istituto

scuola militare

Collegio NATO della difesa

scuola navale

Scuola di Guerra

colonnello

tenente colonnello

grado di colonnello

grado di colonnello

colore, pl. colori, bandiera

sotto le armi

chiamare qualcuno sotto le armi

portabandiera

sergente portabandiera

i colori nazionali

i colori del reggimento

colonna

protezione di una colonna

allineamento

marciare su due colonne

intervallo fra gli elementi di una colonna

lunghezza di una colonna in movimento

motor c.	autocolonna	to combat , v.t.i.	combattere
comb , s.	pettine	combatable , ag.	combattibile
c.-out	rastrellamento	combatant , ag. s.	combattente
to comb , v.t.i.	perlustrare, setacciare, rastrellare	combative , ag.	combattivo, battagliero
to c. out	fare una retata, eliminare (persone sospette) chiamare le leve di riserva	combatively , av.	in modo combattivo, aggressivo
combat , s.	combattimento, battaglia, lotta, conflitto	combativeness , s.	combattività
antiaircraft c.	combattimento antiaereo	combination , s.	combinazione
close c.	combattimento ravvicinato, corpo a corpo	c. of fire and manoeuvre	combinazione di fuoco e movimento
c. air patrol	pattuglia aerea di combattimento	combined , ag.	combinato, congiunto
c. available aircraft	aereo disponibile per il combattimento	c. action	azione congiunta
combat aircrew training unit	unità di addestramento dell'equipaggio aereo	c. Arms	Interarma
c. cargo service	servizio di carico da combattimento	c. common user item	mezzi di uso comune tra unità diverse
c. clothing	abiti da combattimento	c. efforts	sforzi congiunti
c. crew training squadron	squadroni per l'addestramento dell'equipaggio aereo	c. exercise	esercitazione congiunta
c. command	comando in operazioni	c. force	forza congiunta
c. day of supply	approvvigionamento per un giorno di combattimento	c. operations	operazioni combinate.
c. echelon	scaglione di combattimento	c. operations head-quarters	quartier generale delle operazioni combinate
c. effectiveness report	rapporto sull'efficacia del combattimento	c. operations command	comando delle operazioni combinate
c. efficiency	efficienza combattiva	c. operations bombardment battery	batteria di bombardamento delle operazioni combinate
c. in built-up area	combattimento negli abitati	c. naval air operation	operazione aereo navale combinata
c. in woods	combattimento nei boschi	c. military hospital	ospedale militare interforze
c. information centre	centro informazioni sul combattimento	combustion , s.	combustione
c. intelligence	servizio informazioni riservate	c. chamber	camera di combustione
c. logistic support	assistenza logistica alle forze di combattimento	spontaneous c.	autocombustione
c. outposts	elementi in zona di sicurezza, posti scoglio	internal c. engine	motore a combustione interna
c. patrol	pattuglia di combattimento (terrestre)	comfort , s.	comodità, conforto, assistenza
c. power	mezzi di combattimento	aid and c.	aiuto e assistenza
c. readiness	prontezza operativa	command , s.	comando, ordine, autorità, truppe, zona militare al comando di un capo
c. service support	sostegno alle forze di combattimento	alternate c.	comando di sostituzione
c. survival	misure di sopravvivenza durante il combattimento	combat c.	comando in operazioni
c. team	gruppo di combattimento	under the c. of	sotto il comando di
c. zone	zona di operazioni	to be in c. of an army	avere il comando di un esercito
deadly c.	combattimento all'ultimo sangue	to get a c.	essere assegnato ad un comando
meeting c.	combattimento d'incontro	C. in chief	alto comando
sustained c.	combattimento prolungato	c. post	posto comando
to enter c.	entrare, ingaggiarsi in combattimento	execution c.	comando di esecuzione
		full c.	comando completo
		higher c.	comando supremo
		operational c.	comando operativo
		preparatory c.	comando di avvertimento
		second-in- c.	comandante in seconda
		tactical advanced c.	comando tattico avanzato
		tactical air c.	comando aerotattico
		to take c.	prendere il comando
		unified c.	comando unificato
		word of c.	ordine verbale
		c. and control	comando e controllo

c. and liaison circuit	ciruito per comando e controllo	c. in chief Air Forces Europe (NATO)	comandante in capo delle Forze Aeree in Europa
c. control information system	sistema informativo per il comando e il controllo	c. in chief Mediterranean	comandante in capo delle forze del Mediterraneo
c. control requirements analysis	analisi dei requisiti per il comando e controllo	commandership, s.	ufficio, funzioni di comandante
c. control system directorate	direzione dei sistemi di comando e controllo	commanding, ag.	che comanda
c. post exercise	esercitazione con i posti comando	c. officer	ufficiale comandante
c. axis	asse di trasmissione	commando, s.	commando, reparto di truppe d'assalto, da sbarco
c. and signals	comando, collegamenti, trasmissioni	c. man	soldato appartenente ad un commando
c. channel	catena di comando	para c.	reparto speciale di paracadutisti
c. destruct signal	segnale telecomandato di distruzione	commissariat, s.	commissariato, intendenza
c. net	rete di comunicazione tra comandi	c. department	ufficio di commissariato
c. maintenance management evaluations	valutazioni sulla gestione e manutenzione del comando	commisary, s.	ufficiale del commissariato, dell'intendenza
c. management inventory accounting	contabilità inventario della gestione del comando	commissaryship, s.	commissariato
c. personnel summary	rapporto sul personale del comando	commission, s.	brevetto da ufficiale, l'armare (una nave da guerra)
c. personnel management inspections	ispezioni alla gestione del personale del comando	to get one's c.	essere nominato ufficiale
c. post vehicle	veicolo appartenente al posto di comando	to resign one's c.	dare le dimissioni da ufficiale
c. post exercise	esercitazione di posto comando	ship in c.	nave armata
c. retrieval information system	sistema per rintracciare informazioni	c. rank	grado di ufficiale
c. technical inspection	ispezione tecnica del comando	c. for conventional armaments	comitato per le armi convenzionali
to command, v.t.i.	comandare, ordinare, essere a capo di	commissioned, ag.	nominato, autorizzato, munito di autorità
commandant, s.	comandante (specialmente di una scuola, accademia, distretto, porto, fortezza)	c. officer	ufficiale
commandantship, s.	funzioni, ufficio di comandante	non c. officer	sottufficiale
to commandeer, v.t.	requisire, arruolare forzatamente	c. gunner	ufficiale fuciliere
commandeering, s.	requisizione, reclutamento forzato	c. commissary officer	ufficiale di commissariato
commander, s.	comandante, capo, capitano di fregata	c. communications officer	ufficiale addetto ai collegamenti
c. in chief company c.	comandante in capo comandante di compagnia	c. observer	ufficiale osservatore
high c.	comandante supremo	c. ordinance engineer	ufficiale del genio addetto ai materiali
releasing c.	comandante autorizzato (impiego di armi nucleari)	c. supply officer	ufficiale addetto ai rifornimenti
unit c.	comandante di reparto	commodore, s.	commodoro (mar. mil.)
vehicle c.	capo macchina	air c.	generale di brigata (aer. mil.)
wing c.	(aer.) tenente colonnello, comandante d'uno stormo	communication, s.	comunicazione, mezzo di comunicazione, trasmissione
c. in chief Allied Forces	comandante in capo delle forze alleate	c. centre	centro trasmissioni
		c. satellite	satellite di telecomunicazioni
		c. zone	zona delle comunicazioni
		crypto c.	comunicazioni in cifre
		line of c.	linea di comunicazioni
		confidential c.	informazione riservata
		long line c.	trasmissioni a lunga distanza
		radio c.	trasmissioni radio
		route of c.	via di comunicazione
		signal c.	trasmissioni, collegamenti

c. improvement programme	programma di miglioramento delle comunicazioni	component, ag.s. air c. land c. operational c. c. life compound, s. prisoner of war c.	componente componente aereo componente terrestre componente operativa durata di un elemento campo cintato, recinto campo di prigionieri di guerra composto, composito elicottero ibrido compromesso documenti riservati passati a persona non autorizzata documento compromesso (visto da persona non autorizzata) obbligatorio, forzato servizio militare obbligatorio, obbligo di leva computo, calcolo, stima calcolo della forza del nemico rilevamento di radiazioni
c. instructions for reporting enemy sighting	istruzioni per comunicare via radio l'avvistamento del medico	c. ag. c. helicopter compromised, ag. c. classified matter	
c. lieutenant companion, s. c. in arms company, s.	tenente trasmissioni compagno commilitone compagnia, (mar.) equipaggio, ciurma comando di compagnia compagnia comando compagnia comando e servizi plotone compagnia armi pesanti compagnia di supporto logistico	c. document	
c. headquarters headquarters c. headquarters and services c. half c. heavy weapons c. logistical support c.	compagnia mitraglieri compagnia di sanità compagnia mortai compagnia pionieri compagnia fucilieri equipaggio di una nave compagnia armi di accompagnamento compagnia carri compartimento compartimento di carico terreno compartimentale bussola, compasso rilevamento con la bussola rosa dei venti direzione della bussola ago della bussola nord della bussola bussola giroscopica bussola nautica bussola magnetica girare attorno, circondare, accerchiare accerchiato dai nemici compassionevole congedo straordinario (per gravi motivi familiari)	compulsory, ag. c. military service	
machine gun c. medical c. mortar c. pioneer c. rifle c. ship's c. supporting area c.	compagnia mitraglieri compagnia di sanità compagnia mortai compagnia pionieri compagnia fucilieri equipaggio di una nave compagnia armi di accompagnamento compagnia carri compartimento compartimento di carico terreno compartimentale bussola, compasso rilevamento con la bussola rosa dei venti direzione della bussola ago della bussola nord della bussola bussola giroscopica bussola nautica bussola magnetica girare attorno, circondare, accerchiare accerchiato dai nemici compassionevole congedo straordinario (per gravi motivi familiari)	computation, s. enemy strength c.	
tank c. compartment, s. cargo c. cross c. compass, s. c. bearing	compagnia mitraglieri compagnia di sanità compagnia mortai compagnia pionieri compagnia fucilieri equipaggio di una nave compagnia armi di accompagnamento compagnia carri compartimento compartimento di carico terreno compartimentale bussola, compasso rilevamento con la bussola rosa dei venti direzione della bussola ago della bussola nord della bussola bussola giroscopica bussola nautica bussola magnetica girare attorno, circondare, accerchiare accerchiato dai nemici compassionevole congedo straordinario (per gravi motivi familiari)	radioactivity detection, identification and c. to compute, v.t.	
c. card compass direction c. needle c. north gyro c. mariner's c. magnetic c. to compass, v.t.	compagnia mitraglieri compagnia di sanità compagnia mortai compagnia pionieri compagnia fucilieri equipaggio di una nave compagnia armi di accompagnamento compagnia carri compartimento compartimento di carico terreno compartimentale bussola, compasso rilevamento con la bussola rosa dei venti direzione della bussola ago della bussola nord della bussola bussola giroscopica bussola nautica bussola magnetica girare attorno, circondare, accerchiare accerchiato dai nemici compassionevole congedo straordinario (per gravi motivi familiari)	computed air release point comrade, s. c. in arms comradeship, s. concealment, s.	stimare, calcolare, valutare punto calcolato di aviolancio camerata, compagno commilitone cameratismo occultamento, copertura, dissimulazione, protezione copertura al tiro e alla vista concentrare, convergere fuoco convergente far convergere il fuoco di una batteria ammassamento, concentramento zona di ammassamento, zona di raduno campo di concentramento concentrazione del fuoco concentrazione di forze concentramento di massa raduno strategico concentrico fuoco concentrato in un solo punto concetto concetto, disegno di manovra concetto operativo condizione, ambiente, stato condizione reale stato di approntamento della difesa condizioni meteorologiche ambiente operativo viabilità
compased by enemies compassionate, ag. c. leave	compagnia mitraglieri compagnia di sanità compagnia mortai compagnia pionieri compagnia fucilieri equipaggio di una nave compagnia armi di accompagnamento compagnia carri compartimento compartimento di carico terreno compartimentale bussola, compasso rilevamento con la bussola rosa dei venti direzione della bussola ago della bussola nord della bussola bussola giroscopica bussola nautica bussola magnetica girare attorno, circondare, accerchiare accerchiato dai nemici compassionevole congedo straordinario (per gravi motivi familiari)	cover and c.	
competition, s. open c. competitive, ag.	competizione, gara concorso pubblico di competizione, di gara, di concorso esame di concorso per mezzo di concorso posto vinto per concorso (mar. mil.) effettivo, effettivi	to concentrate, v.t.i. c. fire to c. the fire of a battery concentration, s.	
c. examination competitively, av. placed obtained c. complement, s.	competizione, gara concorso pubblico di competizione, di gara, di concorso esame di concorso per mezzo di concorso posto vinto per concorso (mar. mil.) effettivo, effettivi	c. area	
complete, ag. c. round compliance, s.	completo, intero, totale munizione intera condiscendenza, acquiescenza rifiutare di ubbidire ad un ordine	c. camp c. of fire c. of forces mass c. strategic c. concentric, ag. c. fire	
to refuse c. with an order	completo, intero, totale munizione intera condiscendenza, acquiescenza rifiutare di ubbidire ad un ordine	concept, s. c. of operations	
		operational c. condition, s.	
		actual c. defence readiness c.	
		meteorological c. operational c. road c.	

weather **c.**
concussion fuse, s.
condensation, s.
c. trail
condottiere, s.

conduct, s.
c. of attack
c. of defence
c. of fire
to conduct, v.t.i.

to c. the operations
to cone, v.t.i.

to be coned

to confederate, v.t.i.
to c. oneself with

conference, s.
 planning **c.**
confidence, s.
 mutual **c.**
confidential, ag.
c. secretary
NATO c.
to confine, v.t.i.

to c. to barracks
confinement, s.

solitary **c.**
conflagration, s.
conflict, s.
conflict alert
to confront, v.t.

the confronting armies
confusion, s.

the enemy was thrown
 into **c.**
c. reflector

to connect, v.t.i.

connecting route
to conquer, v.t.i.

to c. a country
conquerable, ag.
conquering, ag.
 the **c. army**
conqueror, s.
conquest, s.
 the Norman **C.**, (st.)

conscientious, ag.
c. objector
conscript, ag. s.
to conscript, v.t.

condizioni meteorologiche
 spoletta a percussione
 condensazione
 scia di vapore
 condottiero (di truppe
 mercenarie)
 condotta
 condotta dell'attacco
 condotta della difesa
 condotta del fuoco
 condurre, guidare, diri-
 gere
 dirigere le operazioni
 avvolgere, dare forma di
 cono
 (aer.) essere investito
 dalla luce di riflettori ne-
 mici
 confederare, confederarsi
 allearsi con, formare una
 lega con
 conferenza, rapporto
 conferenza per pianificare
 fiducia
 fiducia reciproca
 riservato
 segretario particolare
 NATO riservatissimo
 relegare, tenere entro
 certi limiti, imprigionare
 consegnare, punire
 reclusione, imprigiona-
 mento
 segregazione cellulare
 conflagrazione
 conflitto, lotta
 allarme in caso di guerra
 affrontare, incontrarsi, tro-
 varsi di fronte
 gli opposti eserciti
 confusione, disordine, sba-
 ragliamento
 il nemico fu sbaragliato
 riflettore atto a confon-
 dere
 collegare, unire, connet-
 tere
 rotta di collegamento
 conquistare, essere vin-
 citore
 conquistare un paese
 conquistabile, vincibile
 vincente, vittorioso
 l'esercito vittorioso
 conquistatore
 conquista
 la conquista dell'Inghilter-
 ra da parte dei Normanni
 coscienzioso, scrupoloso
 obiettore di coscienza
 soldato di leva
 coscrivere, chiamare sot-
 to le armi

conscription, s.
c. of wealth

to consolidate, v.t.i.
to c. a position
constabulary, ag.

the mounted **c.**
to constitute, v.t.

constituted authority
to constrain, v.t.
constraint, s.

to put someone under
c.

construction s.
c. equipment
 under **c.**
 director of naval **c.**
consumption, s.
 daily **c. rate**

fuel c. unit

contact, s.
to establish c. with the
 enemy
to lose c. with the
 enemy
 breaking off **c.**
 close **c.**
c. action

direct **c.**
 imminent **c.**
 improbable **c.**
 maintaining **c.**
 remote **c.**
c. mine
c. point
c. report
to contain, v.t.

to c. penetration

containment, s.
c. action

to contaminate, v.t.
contaminated area
contamination, s.
c. control

c. control line

c. control point

to contend, v.t.i.

contending, ag.

the **c. parties**
contingency, s.

coscrizione, leva
 tassazione straordinaria
 (in tempo di guerra)
 consolidare, consolidarsi
 consolidare una posizione
 che riguarda la polizia, s.
 coll. la polizia
 la polizia a cavallo
 costituire, fondare, for-
 mare
 l'autorità costituita
 costringere, forzare
 costrizione, coazione,
 vincolo
 mettere qualcuno in
 stato di coazione
 costruzione
 materiali da costruzione
 in corso di costruzione
 direttore del genio navale
 consumo
 tasso di consumo gior-
 naliero
 unità di consumo carbu-
 ranti
 contatto
 prendere contatto col ne-
 mico
 perdere il contatto col
 nemico
 rottura del contatto
 contatto ravvicinato
 azione di presa di
 contatto
 contatto diretto
 contatto imminente
 contatto improbabile
 mantenere il contatto
 contatto a distanza
 mina a contatto
 punto di contatto
 rapporto sul contatto
 contenere, trattenere (il
 nemico)
 contenere una penetra-
 zione
 contenimento
 azione di contenimento,
 tattica di arginamento
 contaminare, infettare
 zona contaminata
 contaminazione
 controllo per evitare la
 contaminazione
 linea di controllo della
 contaminazione
 punto di controllo della
 contaminazione
 contendere, combattere,
 contrastare
 contendente, contrastan-
 te, rivale
 le parti in lotta
 contingenza

c. troops crack , ag.	truppe di sicurezza (fam.) scelto, di prim'ordine	to cripple , v.t.i. he was crippled in the war Crisis Response Group	mutilare fu mutilato durante la guerra gruppo incaricato per crisi di emergenza
c. regiment c. shot to crack , v.t.i. a rifle cracked cradle , s.	reggimento scelto tiratore scelto schiantare, esplodere parti un colpo di fucile culla, intelaiatura di sostegno (di un pezzo di artiglieria) (aer.) culla di lancio imbarcazione, natante, aereo aereo mezzo anfibia a cuscino d'aria	critical , ag. c. point c. shortage c. situation c. temperature c. terrain c. altitude c. speed	critico, vitale punto vitale deficienza critica situazione critica temperatura critica terreno vitale altitudine critica velocità che causa vibrazioni approvvigionamento critico
starting c. craft , s.	mezzo da sbarco rampone, (pl.) brega a gancio, pinza per massi gru gancio della gru autogru cassa da imballaggio, gabbia per mine cavità (aperta da una bomba)	c. supplies and materials c. communications system c. housing shortage	sistema di trasmissioni critico mancanza critica di alloggi comunicazioni riservate critiche croce
air c. hover c.	credito, accreditamento credito di movimento credito nucleare strisciare, avanzare lentamente barriera di fuoco ad avanzamento lento mina galleggiante strisciamento rifugio sotterraneo pugnale della Malesia feritoia feritoia pennacchio, criniera, cimiero	c. intelligence communications cross , s. the George C. Maltese C. the Red C. to take the c. to cross , v.t.i. to c. swords	la croce di S. Giorgio la croce di Malta la Croce Rossa andar crociato incrociare, attraversare incrociare le spade, battersi a duello terreno compartimentato fuori strada mobilità fuori strada veicolo fuori strada fuoco incrociato assistenza reciproca strada laterale, crocicchio, bivio, incrocio stradale
crane , s. c. hook mounted c. crate , s.	barriera di fuoco ad avanzamento lento mina galleggiante strisciamento rifugio sotterraneo pugnale della Malesia feritoia feritoia pennacchio, criniera, cimiero	cross-compartment , s. cross-country , s. c.c. mobility c.c. vehicle cross-fire , s. cross-servicing , s. cross-road , s.	terreno compartimentato fuori strada mobilità fuori strada veicolo fuori strada fuoco incrociato assistenza reciproca strada laterale, crocicchio, bivio, incrocio stradale
crater , s.	barriera di fuoco ad avanzamento lento mina galleggiante strisciamento rifugio sotterraneo pugnale della Malesia feritoia feritoia pennacchio, criniera, cimiero	cross-tell , s.	scambio d'informazioni allo stesso livello operativo cartucciera a tracolla balestra
credit , s. movement c. nuclear c. to creep , v.i.	barriera di fuoco ad avanzamento lento mina galleggiante strisciamento rifugio sotterraneo pugnale della Malesia feritoia feritoia pennacchio, criniera, cimiero	crossbelt , s. crossbow , s. cross-examination , s.	interrogatorio con contraddittorio sottoporre a controinterrogatorio
creeping barrage	barriera di fuoco ad avanzamento lento mina galleggiante strisciamento rifugio sotterraneo pugnale della Malesia feritoia feritoia pennacchio, criniera, cimiero	to cross-examine , v.t.	sottoporre a controinterrogatorio
c. mine creep , s. c. hole creese , s. crenel , s. crenelle , s. crest , s.	barriera di fuoco ad avanzamento lento mina galleggiante strisciamento rifugio sotterraneo pugnale della Malesia feritoia feritoia pennacchio, criniera, cimiero	to cross-question , v.t.	sottoporre a controinterrogatorio
to crest , v.t.i.	barriera di fuoco ad avanzamento lento mina galleggiante strisciamento rifugio sotterraneo pugnale della Malesia feritoia feritoia pennacchio, criniera, cimiero	crossing , s.	passaggio, traversata, attraversamento attraversamento rapido passaggio a livello attraversamento di fiume zona di attraversamento corona di paracadute crociera
crested , ag.	barriera di fuoco ad avanzamento lento mina galleggiante strisciamento rifugio sotterraneo pugnale della Malesia feritoia feritoia pennacchio, criniera, cimiero	hasty c. level c. river c. c. area crown , s. cruise , s. average cruising speed cruiser , s. armoured c. guided-missile c. light c. c. battle force	velocità media di crociera incrociatore incrociatore corazzato incrociatore lancia missili incrociatore leggero forza incrociatori da battaglia
c. note paper	barriera di fuoco ad avanzamento lento mina galleggiante strisciamento rifugio sotterraneo pugnale della Malesia feritoia feritoia pennacchio, criniera, cimiero		
crew , s.	barriera di fuoco ad avanzamento lento mina galleggiante strisciamento rifugio sotterraneo pugnale della Malesia feritoia feritoia pennacchio, criniera, cimiero		
air c. c. served weapon gun c.	barriera di fuoco ad avanzamento lento mina galleggiante strisciamento rifugio sotterraneo pugnale della Malesia feritoia feritoia pennacchio, criniera, cimiero		
ship c.	barriera di fuoco ad avanzamento lento mina galleggiante strisciamento rifugio sotterraneo pugnale della Malesia feritoia feritoia pennacchio, criniera, cimiero		
crime , s. c. sheet to crime , v.t. crimp , s.	barriera di fuoco ad avanzamento lento mina galleggiante strisciamento rifugio sotterraneo pugnale della Malesia feritoia feritoia pennacchio, criniera, cimiero		
to crimp , v.t.i.	barriera di fuoco ad avanzamento lento mina galleggiante strisciamento rifugio sotterraneo pugnale della Malesia feritoia feritoia pennacchio, criniera, cimiero		
cripple , s. war c.	barriera di fuoco ad avanzamento lento mina galleggiante strisciamento rifugio sotterraneo pugnale della Malesia feritoia feritoia pennacchio, criniera, cimiero		

c. destroyer flottilla

c. division

c. scouting force

c. squadron

crump, s.

to crump, v.t.

crusade, s.

crusader, s.

to crush, v.t.i.

to c. the enemy

the enemy was **crush-**

ed down by our victory

cry, s.

battle c.

war c.

cryptanalysis, s.

cryptocommunications,

s.

c. centre

c. officer

cryptogram, s.

cryptographer, s.

cryptographic, ag.

cryptography, s.

cryptomaterial, s.

cryptopart, s.

cuirass, s.

cuirassier, s.

culverin, s.

cummerbund, s.

cunette, s.

flottiglia composta da

caccia incrociatori

divisione incrociatori

forza incrociatori

esplorante

squadra incrociatori

(sl. mil.) proiettile, esplo-

sivo

(sl.) colpire violentemente,

bombardare

crociata

crociato

annientare

annientare il nemico

il nemico fu annientato

dalla nostra vittoria

grido

grido di battaglia

grido di guerra

analisi crittografica

trasmissioni cifrate

centro cifra

ufficiale addetto alla cifra

crittogramma

crittografo

crittografico

crittografia

materiale di crittografia

crittoparte (divisione di

un messaggio per motivi

di sicurezza)

corazza

corazziere

(st. mil.) colubrina

sciarpa portata come cin-

tura (cavalleria Indiana)

cunetta di trincea

to ring the c.

currency, s.

custody, s.

in safe c.

safe c. of captured

personnel

to take someone into

c.

customs, s.

c. authority

to pass through c.

c. duties

c. house officer

c. tariff

c. union

customable, ag.

to cut, v.t.i.

to c. steps

to c. down

to c. off the enemy

to c. off negotiations

to c. off supplies

cut off, s.

cuthbert, s.

cutter, s.

wire c.

cutter, s.

revenue c.

cyanogen, ag.

cyanogen agent

cycle, s.

dare il segnale del co-

prifuoco

dati aggiornati al mo-

mento dato

custodia, vigilanza, im-

prigionamento

in luogo sicuro, sotto

buona guardia

custodia di personale

catturato al nemico

arrestare qualcuno

dogana

autorità doganale

passare la dogana

dazio doganale

doganiere

tariffa doganale

unione doganale

soggetto a dogana

tagliare, tagliarsi, inta-

gliare

intagliare gradini

sterminare ridurre

tagliar fuori il nemico

interrompere i negoziati

tagliare i viveri

arresto di un motore a

reazione

imboscato

strumento per tagliare

pinza tagliafili

lancia armata

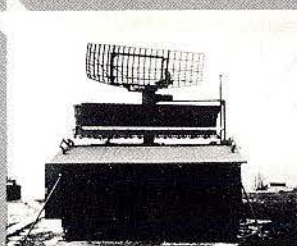
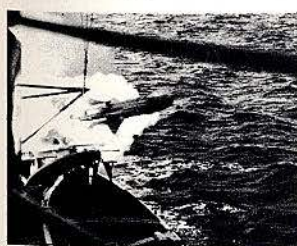
nave guardacoste

cianogeno

tossico del sangue

ciclo

40 YEARS EXPERIENCE



SMA is a flexible company founded in 1943. Since 1948 has been active in design, development and production of electronic equipment for defence. Main activities are radars for ground, shipborne, airborne, missile applications and related display systems. The company broad spectrum permits the supply of turnkey systems tailored to the end-user needs.



SEGNALAMENTO MARITTIMO ED AEREO

SMA's basic product lines and business sectors include: High definition and discrimination coastal radar control stations, both for maritime traffic management systems and military application (anti intrusion, coastal defence, mine splash detection); Shipborne navigation /search radars devoted to low, very-low air coverage (anti sea skimmers); Missile active homing heads, provided with a variety of ECM devices, for SSM (OTOMAT MK2) and ASM (Marte MK2) application.

patrol aircraft; Standard Pod contained search radars for fixed wing aircraft to be employed in conjunction with ASM; Integrated search and tracking radars for A/A defence to be employed both on specialized trucks (OTOMATIC) or on semi-mobile/fixed station for point defence; applied research aimed toward millimetric waves (up to 100 GHz) in active and passive sensors (radiometer); Duct analysis and electromagnetic propagation forecast.



"Le industrie della Difesa - Annuario 1988" (The Defence Industries - Year Book 1988). Supplement to No. 2-3 of "Difesa Oggi" (Defence Today), published by Publi and Consult, Roma, 1988, pages 304, Lire 50,000.

The Industries of Defence - Year-Book 1988 is, together with The Air-Space Industries, The Industries of Security and The Industries for Civil Protection, part of the work "Year Books of Italian HI-TECH Industries. The four books are devoted to different economic sectors having in common the use of advanced technologies.

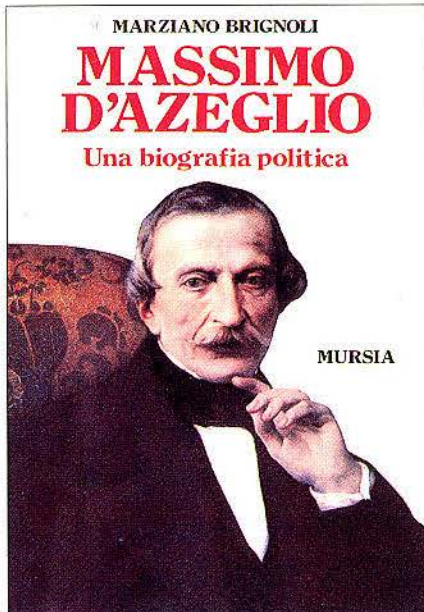
Year Books of Italian HI-TECH Industries represents, so as to say, an encyclopaedia regarding those firms which operate in the vital sectors of the industrial structure of the Nation. The Industries of Defence - Year Book 1988 maintains the general lines of the previous edition and underlines the importance of a bilingual, Italian-English, text, for publications of this kind designed for an international public.

The book is divided into three parts; the first part summarizes in synoptic tables the activity of about 800 industries operating in the Defence branch, subdivided into classes of items. In the second part a picture of the economic situation of the industries of Defence in Italy is drawn out together with an analysis regarding the technologic condition and how the foreign and domestic policy affects this field.

Lastly, in the third part we find a guide to the organization, financial situation, activities and programmes as well as international interests of each industry.

The book is important for all those who wish to be up-dated in this field.

Augusto Mastrofini

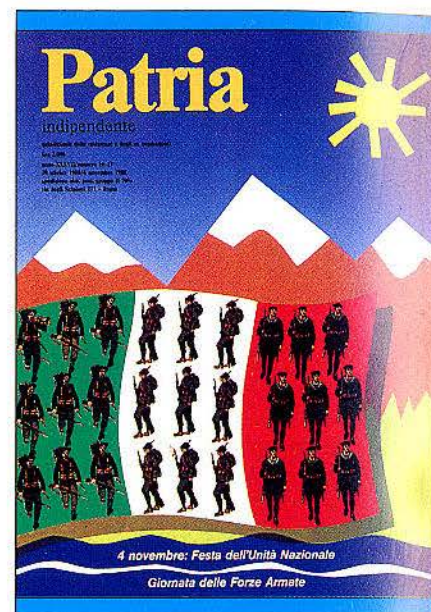


Marziano Brignoli: "Massimo d'Azeglio - Una biografia politica" (Massimo d'Azeglio - A political biography), published by Mursia, Milan, 1988, pages 365, lire 35,000.

Massimo d'Azeglio may be considered a fairly atypical figure even in the varied world of the minor and major characters of the Risorgimento. Cavalry officer, painter, novelist, political writer: a sum of experiences which reached its peak in the most important and meaningful appointment as President of the Cabinet of the Kingdom of Sardinia which he occupied from May 1849 to May 1852, immediately after the defeat of Novara which ended the first war of independence, to the advent of Cavour. In his political activity d'Azeglio put some of his easy-going and unconventional artistic style, but above all he put his honesty. He was the firm custodian of the Statute and the national flag, at a time when neither the one nor the other enjoyed the sympathy of the people of Europe and of Italy. When he was replaced as head of the government by the more ingenious and open-minded Cavour, he retired and started painting for a living, remaining yet a man on whom to count for difficult appointments such as the Prefecture of Milan in 1860 and whose sense of duty as regards the Institutions would never allow him to refuse engagements which, in truth, gave him more thorns than roses.

The book outlines a picture of Massimo d'Azeglio's public life, with its lights and shades; it draws out the political personality of this peculiar man with his qualities and his limits. It is designed as a contribution to a better understanding of a man who is still today an example of public loyalty and honesty.

Ferdinando Schettino



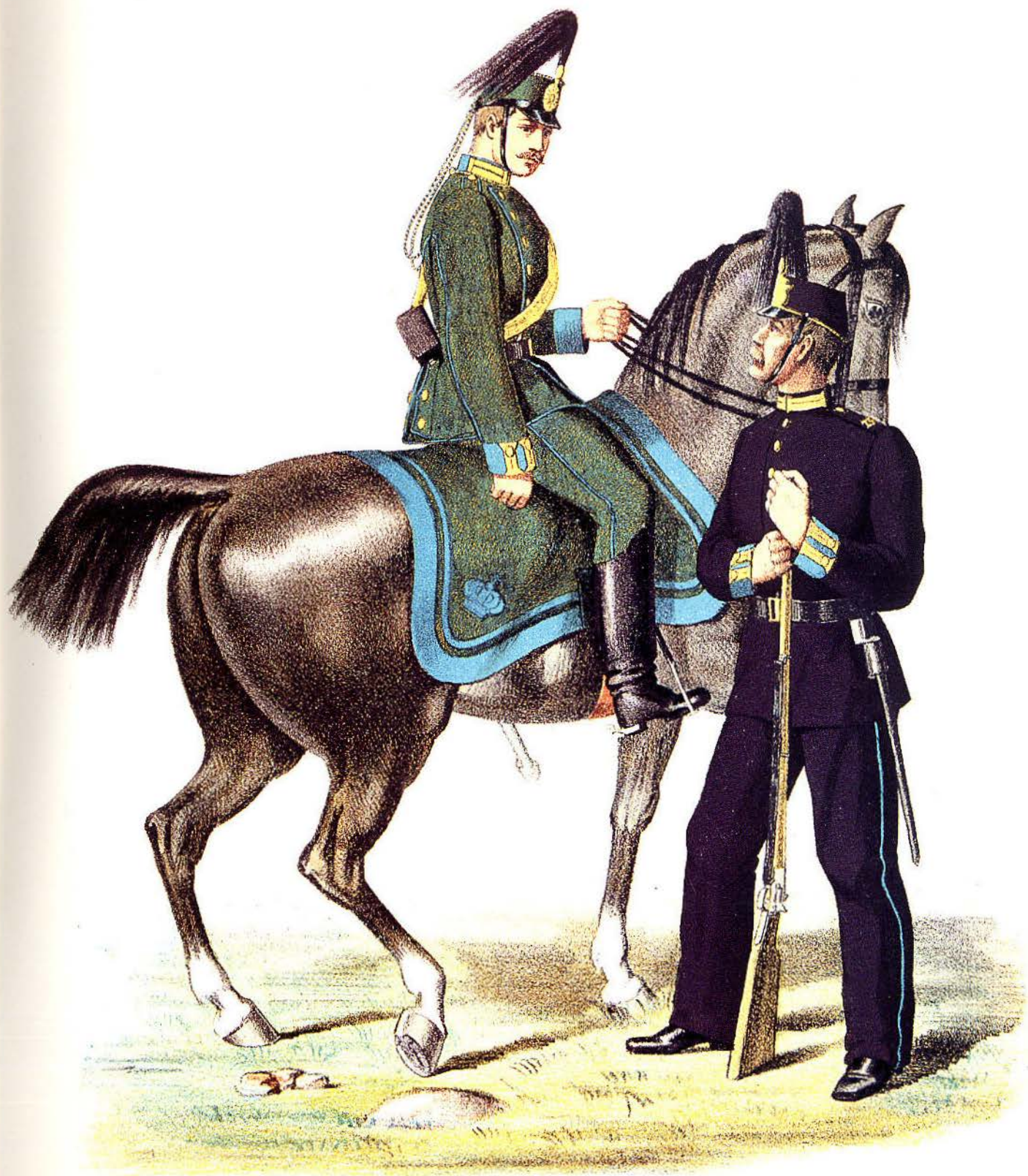
"Patria indipendente" (Independent Fatherland) fortnightly magazine of veterans and the Resistance, year XXXVII, Number 16-17, Rome, 68 pages, Lire 2,000

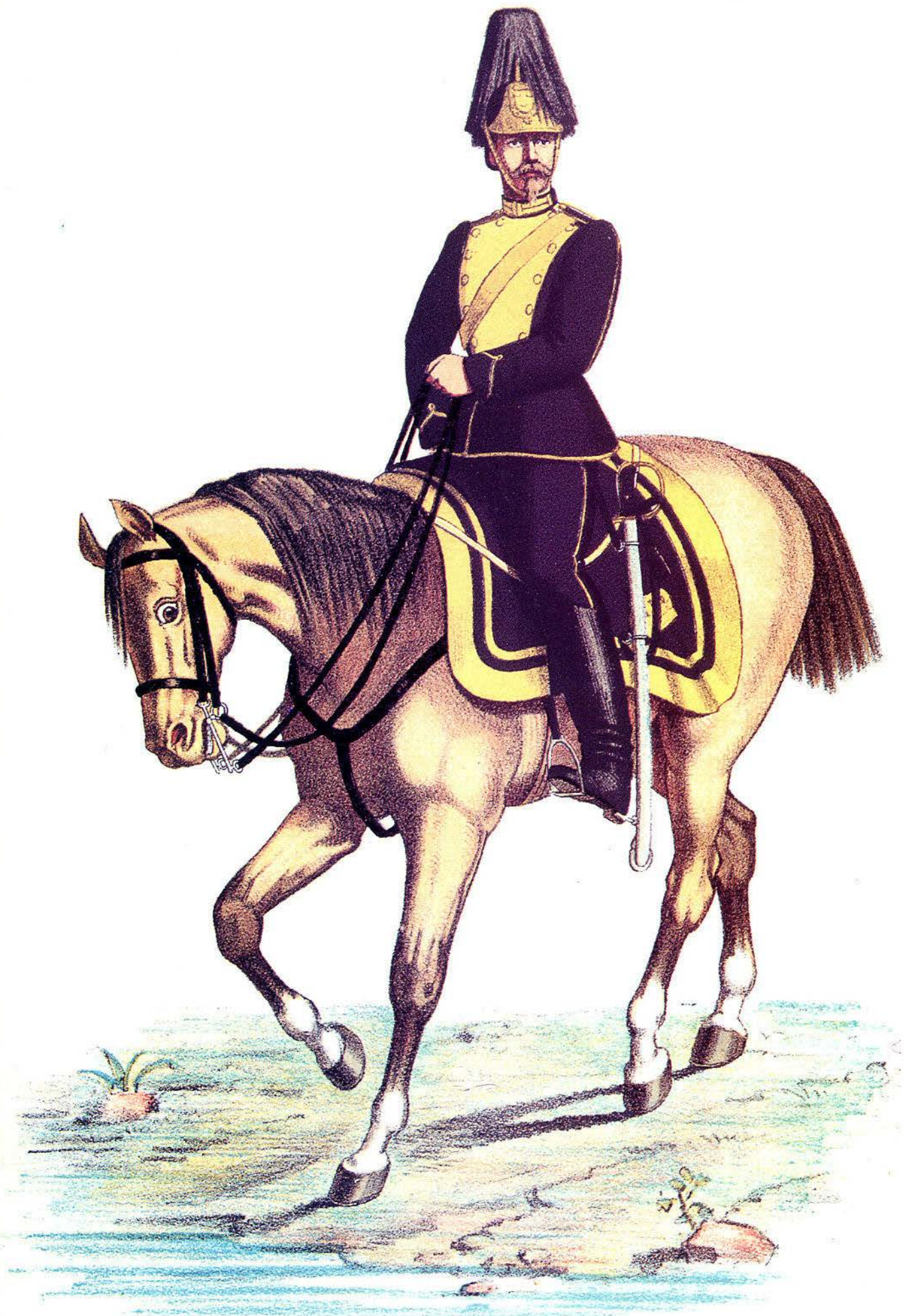
Number 16-17/1988 of "Patria indipendente", set up in coincidence with the day celebrating the Armed Forces, was drawn up in a "monographic" key to underline the love, the appraisal and the solidarity that this publication intends to give to the Armed Forces.

Among the many and very interesting articles contained in this number, compiled both by political and military personalities, mention must be made of the article drawn from President Cossiga's highly significant speech at the CVL meeting in Cuneo; Minister Zanone's interview on the subject of security and peace; those regarding the formation of the officer and non commissioned officer Cadres; the first of a series devoted to the recruitment systems of the armies of other Countries; the brief, but significant note devoted to a heroic combatant of the Resistance, who was awarded the gold Medal for Military Valour, Lieutenant Colonel Andreani. The officer, after whom the 31 armoured Battalion was named, represents one of the brightest examples of patriotism. Lastly, the writing dedicated to the monument recently unveiled in Rome in memory of the heroic behaviour of the "Acqui" Division at Cefalonia and Corfu.

"Patria indipendente", in fact, has reached its aim of wanting, on the 70th anniversary of Victory pay homage to the Armed Forces, acknowledging the fact that they are the pillars of our democracy, in security and in peace.

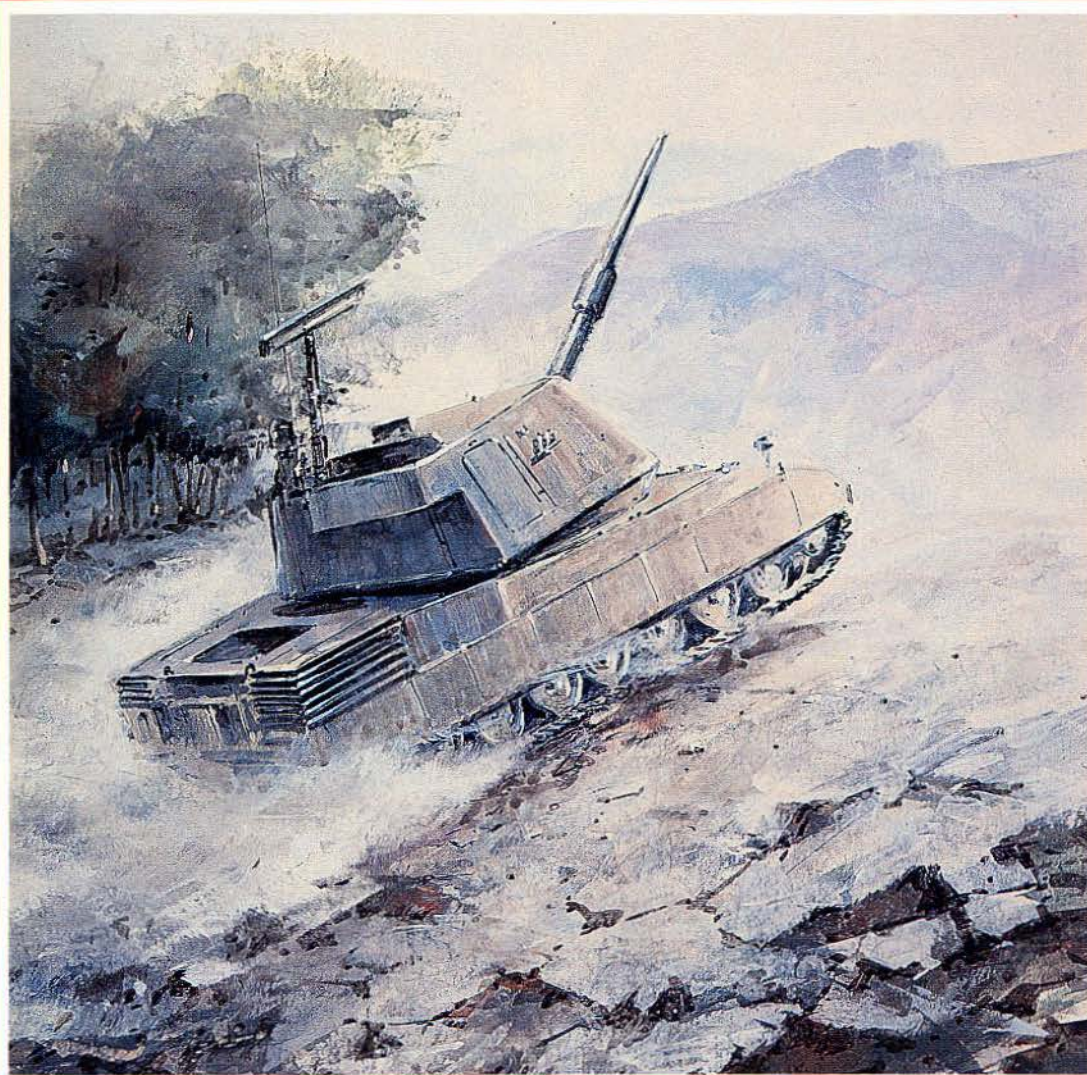
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JULY
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during the 1st World
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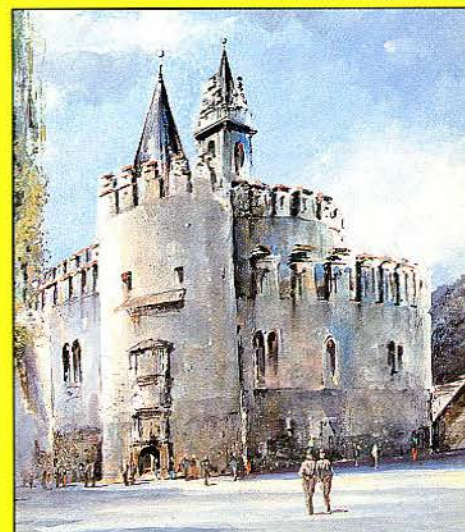
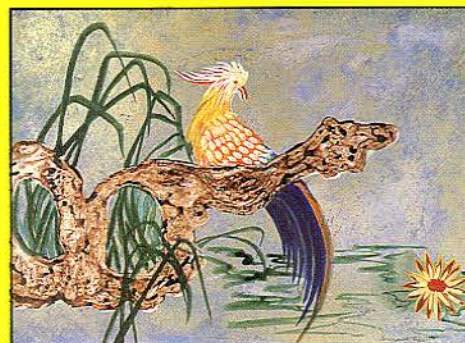
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ITALIAN ECONOMY AND



INDUSTRY

PROSPECTS IN VIEW OF THE EUROPEAN SINGLE MARKET



I think the first aspect to be marked, concerning the prospects of the Italian economy and industry in view of 1992, is the quantitative, that is the dimension of the European single market.

In 1992 there will be a market of about 320 million consumers, bigger than the North American one and almost three times bigger than the Japanese. A market with technical standards that must be uniform, where public orders will be offered in free competition to all Community enterprises, where there will be full competition in bank and financial services.

The birth of this market will cause, according to the Cecchini report, in its opening phase, an increase in the European GNP between 4% and 5% and an increase in employment in the order of 2 million units. So it represents an occasion to start a new phase of development in our Old Continent and a way to better equip it in the competition with the economically strong areas of the world, the United States and above all Japan.

But the single market also represents for the European Countries the engagement to be subject to new rules and new behaviours, both in the domestic and international fields.

All the European Countries have to keep up pace: so, the single market is an occasion that will turn into a necessity. In fact, those who do not adapt themselves in time, will not only run the risk of getting no more space on a wider market, but even of losing space on their own national market.

Today, the problem we have to face is this: to take the great opportunity of economic and social growth coming from the single market, and to avoid this can start a process of outcasting of our Country or of its weakest areas.

Which is the state of the Italian

Francesca Gagliardo di Carpinello:
Composition, oil canvas cm. 50 x 70
(1985)



Francesca Gagliardo di Carpinello: *Bird of Paradise*, oil canvas cm. 100 x 120 (1988)

economy and industry in sight of 1992? Which are the strong and the weak sectors? What is necessary to do to take the growth opportunities and to avoid the risk of decay?

These are the questions to be answered in order to evaluate the real conditions under which our Country is going to face the appointment with the single market.

I think that nobody denies the effectiveness of the Italian industrial system and its capability to compete effectively in the international context.

If we go over the history of our last half century, we can see that the industry played a decisive role, both in the reconstruction of the Country and in the economic "boom"

The vitality of the Italian industry represents a point of honour of the Country in view of the European single market, as it was, however, over more than 40 years from World War II, that witnessed the grandiose transformation of a Country that was mainly based on agriculture, into the fifth industrial power of the World.

of the '50s-'60s, and in the positive effects coming from that fundamental choice for the economic development represented by the opening to the European markets, that took place by the end of the '40s and that was strengthened through the Rome Treaty in 1957.

These are real cornerstones that outlined, from a strategic point of view, the position of our Country on the international scene.

Such decisions were taken during those years by a far-sighted political

class that was able to overcome the numerous corporative resistances and the fear of some sectors of the industrial and production world, still used to the protectionism of the '30s.

Then, I think that it was thanks to the industry if our Country overcame the crisis of the '70s, due to international problems, such as above all the oil "shocks", but also to the widespread dissent of the Western world and of the capitalistic society started after the movement of 1968.

In those years capitals and financial resources, necessary for the infrastructures and the support to production activities, started being used more and more for the expansion of the welfare and patronage system of the social State, for the recovery of bankrupt firms, and to balance the loss of the public industry. The Italian industry lost its competitiveness while the whole economy suffered heavy inflationary waves.

It was just the industrial system that, facing domestic and international difficulties, was able to react positively, entering the way of reorganization and innovation, coming out of this experience stronger. This allowed the Country to change the downward trend and start expansion.

The industry — entrepreneurs and workers — acted without the support of the Government. It will be enough to remember the facts of Turin of 1980 and “the march of the 40 thousand” to realize it.

Yet, it is right and proper to admit that, facing the terroristic attack that covered our streets in blood, the political class and trade unions were able to find a significant unity of goals and firmness in defending the State that was decisive to defeat, or at least limit, the phenomenon of terrorism.

The process of reorganization of our productive apparatus started gaining speed just from the turn-point of Turin in 1980 on. It concerned both the process and the products and all financial aspects as well as the organization and running that deeply changed, also thanks to the more and more massive introduction of the new technology. This caused new massive investments of the enterprise, that at the beginning were used to increase the productivity of plants and to improve products, and now also used to widen production.

The process of reorganization of the Italian industrial system was more intense than that of most industrialized Countries, allowing a



decrease of 4.6% in the unit costs in our private sector. During this period only Japan (−7.1%) and Great Britain (−6.4%) were better, while the decrease that took place in France (1.6%), Germany (−1.5%) and the United States (−1.5%) was definitely lower.

This process of reorganization, together with the high quality of the products, allowed our Country to remain, as a whole, competitive on the foreign markets and to cope adequately with the price rise that occurred because of factors external to

Francesca Gagliardo di Carpinello:
Composition, mixed technique on
cartoon cm. 50 × 70 (1988)

the enterprises (levying of taxes, contribution burdens, inefficiency of services, interest rates, etc.) and that today penalize our enterprises with respect to foreign competition.

The difficulties that the Italian industry had and still has as regards international competition, just came from these reasons that are external to the enterprise itself, do

not question but confirm the solidity and the technological and modern organization of our industrial system that is, however, able to get good results. This is shown, first of all, by the growth of the industrial production, that since 1984 has been about 3-4% per year, and by the esteem that the "Made in Italy" trade-mark still has in the world.

Actually, many are the signals showing the high level reached by the Italian industry.

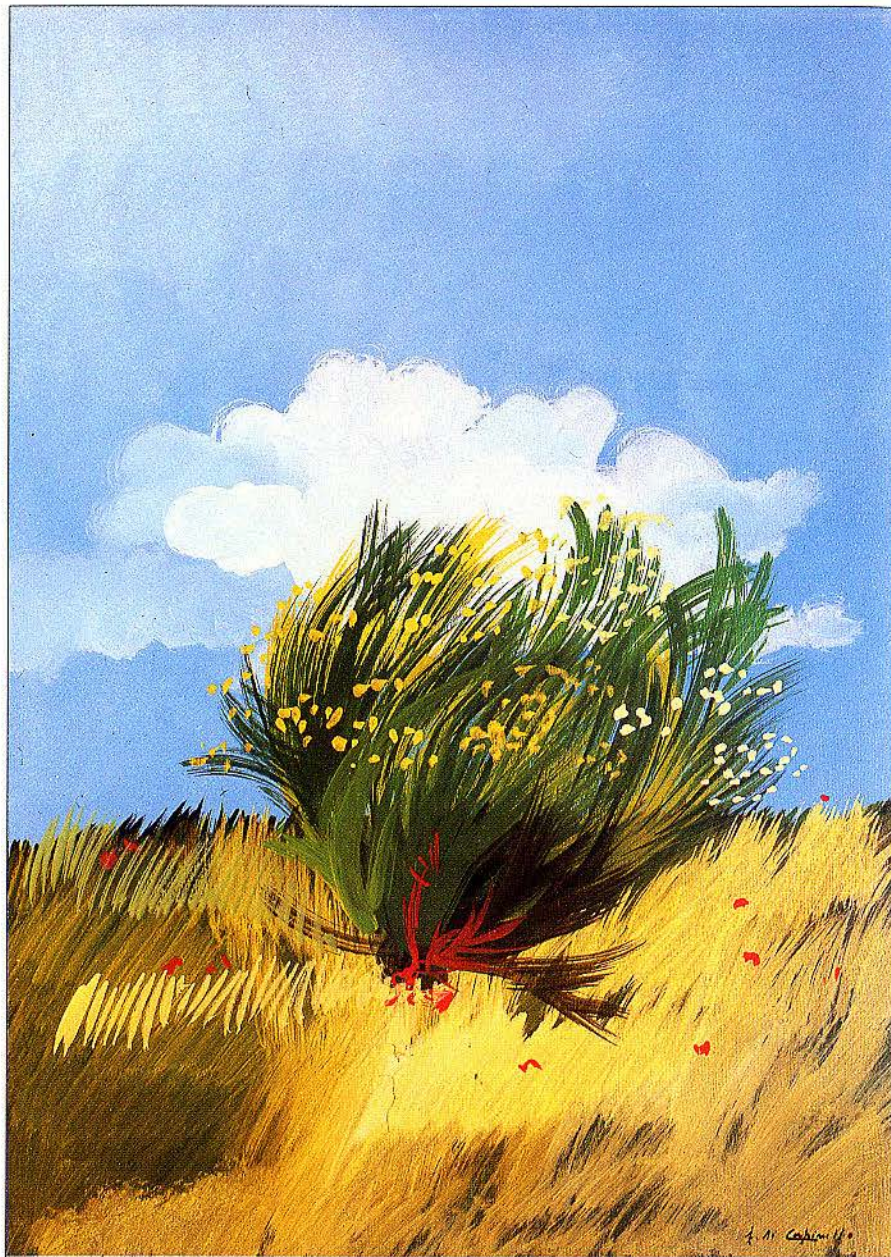
The structure of the enterprises' budgets is another significant proof: in the '80s, in the light of a decrease in debts, Italian enterprises came to budgets similar to those of the main industrialized Countries. And such a process of financial adjustment took place without hindering investments, that increased, and in parallel with a big increase of the added value per unit (equal to about 4% per year).

Equally meaningful is the level of internationalization. Now it involves also small and medium enterprises and shows itself, not only through a better stability of the trade flows, but also through more numerous industrial investments inwards and outwards.

Everybody knows how Italy is well disposed towards foreign trade; its exchange is equal to about one third of the GNP (350,000 billions).

On the contrary, the international productive integration of our industrial system is more recent — and so it deserves more attention.

According to a survey carried out by CNEL (National Council of Economy and Labour), in 1985 there were already 1,200 Italian enterprises — with about 500,000 units and total sales equal to 80,000 billion Lire — having foreign investors and about 700 foreign enterprises — with 250,000 units and total sales equal to 40,000 billions — having Italian investors.



The realization of the single market must be accompanied by common policies about research, environment, energy, instruction and training, small enterprises that must be helped to grow, also in terms of dimension, foreign trade.

This estimate does not consider portfolio investments, made by those who do not take part directly in the industrial running of the shared enterprise, and that would of course increase a lot the amount of these figures.

During the last three years the trend became more marked and concerned both the influx of capitals from abroad, and, above all, the expansion of Italian enterprises abroad.

In fact as concerns Italian investments abroad, there was a rapid

increase, due to the initiatives of some large enterprises and to the progress made by our legislation on the way of the monetary liberalization.

In the last few years the internationalization strategy of the Italian enterprises was characterized by an increasing engagement towards the signing of cooperation agreements with foreign enterprises. Such forms of cooperation took, from time to time, the shape of "joint ventures", within which is established a share society, or a society based only on contractual agreements, without any capital sharing and limited to technology exchange and to commercial and production relationships.

Other strongholds of the Italian economy of the '80s are: the revival of the contracting spirit that brought to the formation of a plurality of new enterprises and new initiatives; the regained trust in the contracting system from savings, that started pouring again into the production activities. The latter is a very important aspect if we consider that Italian families save about 25% of their income: this figure is more than double that of the other European Countries, higher than the Japanese (17%) and much higher than that of the United States (4%).

This brought to coin for Italy that expression "widespread capitalism", that I think represents faithfully enough the climate of these years of steady expansion and that is, in my opinion, the main guarantee of progress for our Country.

If industry, propensity to save and contracting spirit are the real strongholds of the "Italian system" in international competition, yet there still remain weak points stopping our development potentiality, making our way to the European integration more difficult.

Public finances, insufficient infrastructures, the inadequate efficiency of services, the backwardness of the fiscal system, the high labour and capital costs, inelasticity of the labour market, the presence of areas that are not yet open enough to competition such as credit, trade and

state shareholdings, are the main aspects to face and solve.

Within this sphere, today the top priority is with no doubt represented by the public expenditure, that must be attacked without delay, to reduce that huge deficit that is the weakest aspect of the Italian economy. This is a factor we were under the illusion to live with for a long time, but now it has reached its crucial point beyond which it is impossible to go without heavy effects for the whole system.

It is necessary to limit the public deficit both through cuts in current expenditure and selecting tasks and direct interventions of the State, freeing the public administration from the burden of direct running that can be carried out by privates more efficaciously. Instead, actually the situation is characterized by an excessive public presence in the running, and the attempts to limit it are not enough yet.

So, public services, and in general infrastructures are another very crucial point for our system.

If the industry, modifying the structure of offer and utilization of productive factors, made, in the last few years, important steps forward, reorganizing and adapting itself to the new needs of the domestic and international market, there took place, instead, an inverse process, a degradation process, in the field of infrastructures and public services.

All available indicators show in the last years a decrease, or in the most favourable cases, a stability of the level of efficiency of services.

Few examples will be enough. The transport and communication services were characterized by a reduction of productivity that caused a lower level of efficiency than in 1970. A survey carried out by the Ministry of Postal and Telecommunication Services shows that in the past few years, together with a high increase in personnel, a worsening in the quality of service took place, so that our distance from our other competitor Countries increased. The results of a survey carried

out by an important institute, recently presented, confirms that our Country is the tail-end of Europe in the field of services: we definitely have the lowest number of telegraph, telex and railway lines, of bank counters and of underground lines per number of inhabitants.

As a consequence of this situation, the regained efficiency of our private sector in the '80s, that allowed, however, the enterprises to compete on the international market, was not enough to improve the competitiveness of the "Italian system" as a whole, so that it had to suffer the consequences of public services that not only did not gain back their productivity, but in many cases are still backward.

In order to change this trend, it is necessary to aim, above all, at an increase of investments in infrastructures.

A serious program of public investments, would not only relaunch the efficiency of services and reduce costs, but would also be an important factor of income and employment growth, creating, moreover, professional character and ability that could be decisive to improve competitiveness in many production fields. For example this happened in the past with investments in the sector of motorways and hydro-electric power plants.

These phenomena cannot be exactly measured, but each of them contributes to increase the efficiency of enterprises and the quantitative growth of production; probably similar effects would take place also in case of massive investments aimed at improving the infrastructures of rail transport, of telecommunication and postal services, and more in general, of any public service.

But the realization of a program of investments in infrastructures can not leave out of consideration the ability of the public administration to get ahead with it.

At present this ability is not enough. Experience teaches that on one side, the accomplishments are much less numerous than the pro-



Francesca Gagliardo di Carpinello: *Still-life*, oil canvas cm. 50 x 70 (1988)

The growing role of technology and innovation requires for every industrialized Country to choose an adequate research policy, that is today the most important strategic factor of its industrial competitiveness and, I would say, of its own defence.

jects and that for the public sector it is more and more difficult to spend the sums destined to investments, and that on the other, faults in the running of the public services increase and make them expensive and inefficient.

It is impossible to get out of this situation if new efficiency and market regulations are not introduced into the public administration, and if a more open dialogue and more penetrating synergies between public and private sectors are not encouraged, both for the realization of infrastructures, and for the running of the public services. This implies also a progressive elimination of the monopoly under which many

public services work, leaving more space, when it is possible, to a real private competition.

Of course, the modernization of infrastructures and the better efficiency of public services are tightly linked with the resources available for these operations. Therefore, the problem of public finance and its reorganization is top priority.

From this point of view the Financial Law, even if it contains some innovative measures to reduce the public deficit, can be considered

only as a small step in the right direction. In fact it is an action mainly based on income, that in some cases is uncertain and in any case unrepeatable. On the contrary the decrease in expenditure is very modest and above all does not concern waste, but damages investments that, this way, are delayed.

So, if on the one hand the purpose of reorganizing the State accounts, that is the basis of the economic manoeuvre for 1989, must be praised on the other it is

necessary to realize that it doesn't have enough effect on the mechanisms that feed the current expenses and does not solve what we defined as the main problem, that is to develop infrastructures and make public services more efficient.

After all, the Minister of Treasury himself, after the passing of the Financial Law from the House said "the difficulty comes now", that is when it is time to face seriously the problem of re-equilibrating the expenses for health and social security that go on breaking the ceiling on expenditure. It would be wrong to go on increasing the tax and contribution burden, both because it is already heavy, and because without a deep reform of the public management, such operation would turn into a transfer of resources from the productive to the idle sector.

In other words, to keep inefficient institutions alive, beside damaging workers and citizens uselessly, weakens those enterprises that produce resources, starting perverse spirals that our Country already experienced.

Among the other weak points of our Country in view of the European single market, I think we have to mention the fiscal system that is very important in any industrial democracy, both from the point of view of equity — in Italy there is too much tax evasion — and for the economic development.

The fiscal problem of our Country is not that of a total increase of the fiscal burden, but rather that of an equalization and of the starting of a process of simplification able to encourage development and to take the Italian system nearer to that of our Community partners. It is necessary, above all, to encourage investments rather than consumption; to re-equilibrate the burden among direct taxes, social charges and indirect taxes; to simplify proceedings and to improve the administrative structures and the mechanisms to control evasion.

An adequate use of the fiscal lever could supply an important contribution to the strengthening of competitiveness among enterprises.

In order to increase the number of tax-payers allowing this way to reduce the fiscal burden on employees and productive activities, that are today the main, if not even the only, sources of income, without jeopardizing the State income, it is necessary to fight evasion. On the contrary, it is at least debatable to face the problem of the financial revenue and that of capital gains, separately from the problem of the reorganization of the tax system. Also in order to avoid negative effects on the propensity of savings to pour into the productive activities, it is necessary to come to a gradual uniformity of treatment of the financial revenue, in view of a Community harmonization, to avoid inequalities at the expense of our enterprises.

Let's explain now the part that the "Confindustria" is going to play in view of the European single market and the initiatives it already took and that it is going to take.

Since we consider the European single market as a good occasion for a better and more balanced development, for the broadening and success of the market economy, for the widening of the citizens' fundamental freedom, we engaged, as social part representing private industrial enterprises and making ourselves responsible for general interests, to support every initiative able to encourage an effective and timely European integration.

Since today the major difficulties Italy has to face for its complete integration in Europe are those of the public sector, I think that the first task of industrialists, and so of the "Confindustria", must be that of urging the Government and the political parties to make up for the delay in public finances, infrastructures and services. All this can be done through our analyses and proposals in order to contribute to reach the best solutions.

This is what we are doing with our meetings and initiatives about strategic matters as well as matters concerning general development, such as the relation among State and

economy, energy, environment, reorganization of towns, of the South of Italy, of School and formation, that are just some of the most important ones and that recently have been subject of our attention. Moreover we are always in touch with the Government, the Parliament and the political parties to which we refer our ideas and proposals about the economic policy to adopt for the development and European integration. For this purpose we are also drawing up a precise fiscal proposal that we are going to submit to the Government as soon as possible.

We also turn the same attention to the relation with the workers' trade unions. The European integration — that requires similar conditions among the Community enterprises as concerns the labour cost and the order in the labour market — needs from Confindustria a strong engagement to establish a system of industrial relationships, moving within general compatibility, and allowing to define new regulations, being up to the level of the challenges we have to face. General compatibilities that must be respected also as regards the labour cost of the public service that recently showed a dangerous trend: to ignore the fundamental problem of the relation between salary increase and productivity increase.

We already started a confrontation with the trade unions about general matters such as taxation and specific matters such as job-training contracts that proved to be a very useful instrument allowing young people to start working (about one million in the last three years). Now it's our intention to start, as soon as possible, negotiations to debate the whole matter about the regulations of the industrial relations. All this is unavoidable, both because in 1989 some important contracts expire, and because the European integration needs a more flexible structure of the labour cost and labour market.

Then the European single market requires also a specific engagement

Francesca Gagliardo di Carpinello:
Composition, oil canvas cm. 50 x 70
(1986)

of the Confindustria towards the partners.

Although the Italian industrial system is generally well equipped to cope with the challenge of the United Europe, yet the year 1992 will undoubtedly ask our enterprises further adaptation attempts. Above all small and medium enterprises have to speed up their process of modernization in the productive, promotional, commercial, organizing and financial fields.

Also the Confindustria has to make the same adaptation attempt. Taking above all into consideration the smallest enterprises, that need more support, we passed our "Project Europe", involving the whole associative system and that established five fields of activity: study and research, information, promotion and look, entertainment, training.

The project envisages a series of initiatives-information net about the EEC lines and regulations, flow of information about the progress of the European internal market, support of the industrial organization to the Italian interests represented in Brussels and Strasbourg, unity with the European representatives, that is among the many industrial confederations — in order to help the Italian industrial enterprises to take all opportunities offered by the single market.

The co-ordination Committee of this Project already turned its attention to some important matters for enterprises, such as the fiscal harmonization, liberalization in the circulation of capital, public contracts, public-private relation, school etc. And we also opened in our Associations 41 Eurocounters, feeded through the Brussel Delegation, and connected to each other, to the main office and to Brussels through our Giano system.



The problem of the lack in public resources and the difficulty in starting a constructive dialogue among all researchers and in transferring the results to the application field still remains, and I think also our Armed Forces can realize it.

Last 13th December we met the other industrial confederation of the European Countries in Paris, within a meeting that stressed the engagement of the European Entrepreneurs for the European integration. Later, that is on December 15th, on the occasion of the Council of the

Presidents of our territory and category associations that took place in Rome, beside a series of new initiatives in the field of information and promotion, we also presented a real manifest of the Italian industry for Europe.

The Confindustria thinks it is

necessary to speed things up in order to respect the terms fixed by the stages of the Community integration, and first of all that of July 1990 for the liberalization in the circulation of capital, that is propaedeutic to the establishment of an European central bank and the adoption of a common European currency, that all entrepreneurs wish because they think it is necessary for a real and deep integration among European Countries.

Moreover, the realization of the single market must be accompanied by common policies about research, environment, energy, instruction and training, small enterprises that must be helped to develop, also in terms of dimension, foreign trade.

Since we do not consider the single market as a stronghold closed to the rest of the world, but on the contrary we consider it as an occasion to increase and liberalize the world exchange, the Confindustria is today very active in encouraging the international projection of the associate enterprises, above all the small and medium ones that experience the major difficulties. This brought us — through meetings and missions abroad — to improve our economic diplomacy both on the traditional markets and on those offering new chances to our enterprises, such as East Europe and South-East Asia.

Today Europe is more and more interested in the political and economic innovations of the East European Countries, and above all of the Soviet Union with its *perestroika*.

That Country is now much more interested in the opportunities coming from collaboration and economic and cultural exchange with the Western Countries, and this is already giving the first results.

The Italian presence in East Europe and above all in the Soviet Union, with specific structures and representation, is increasing more and more. Contracts, agreements and joint ventures, that in the past concerned above all big enterprises, are now being extended — even if

with major difficulties — also to the small and medium ones that, because of quality of products and flexibility of action, can better satisfy the needs of that market.

Yet, the cooperation relationships between East and West and between our Country and the Soviet Union are not enough with respect to the respective potentialities. In particular, during the phase of carrying out the agreements, difficulties and delay arise, due to differences in the legislation and ideology that reduce their importance and hamper their full development.

Because of the capacity of that market and given that our enterprises need to be assisted, as Confindustria we think we have to strive to overcome any obstacle and facilitate the development of relationships with the Soviet Union. For this purpose we are going to establish useful contacts among enterprises, without opposing or duplicating the work of Chambers of Commerce or of ICE (National Institute for Foreign Trade).

These economic opportunities are based on and will benefit from the strengthening of the détente process between East and West that has made important steps forward during the last years.

Also the end of the Iran-Irak war cannot only smoothe the way towards a closer commercial cooperation with both Countries, but, more generally, can contribute to limit tension in the whole Middle-Eastern area, that still today is one of the most troubled spots of the world. In this sector Italy has a big responsibility. Ours is an European Country and is working for a closer, not only economic but also political, integration of the EEC Countries. Yet, we are in the core of the Mediterranean sea. There are still many Countries that have not started yet a real economic development. The demographic pressure and unemployment may force many workers from those Countries to look for a job in Italy or in other European Countries; in fact this is what is already happening. In any

case they are immigrants that our economy could need. But in order to avoid tension, it is necessary to increase the engagement of all Community Countries, to support the development of the other side of the Mediterranean sea, promoting this way, the birth of an integrated economic system and reducing disparities.

Before concluding, I would like to stress a matter I think very important: the increasing role of technology and modernization in the general competition characterizing the international scene on the threshold of the '90s.

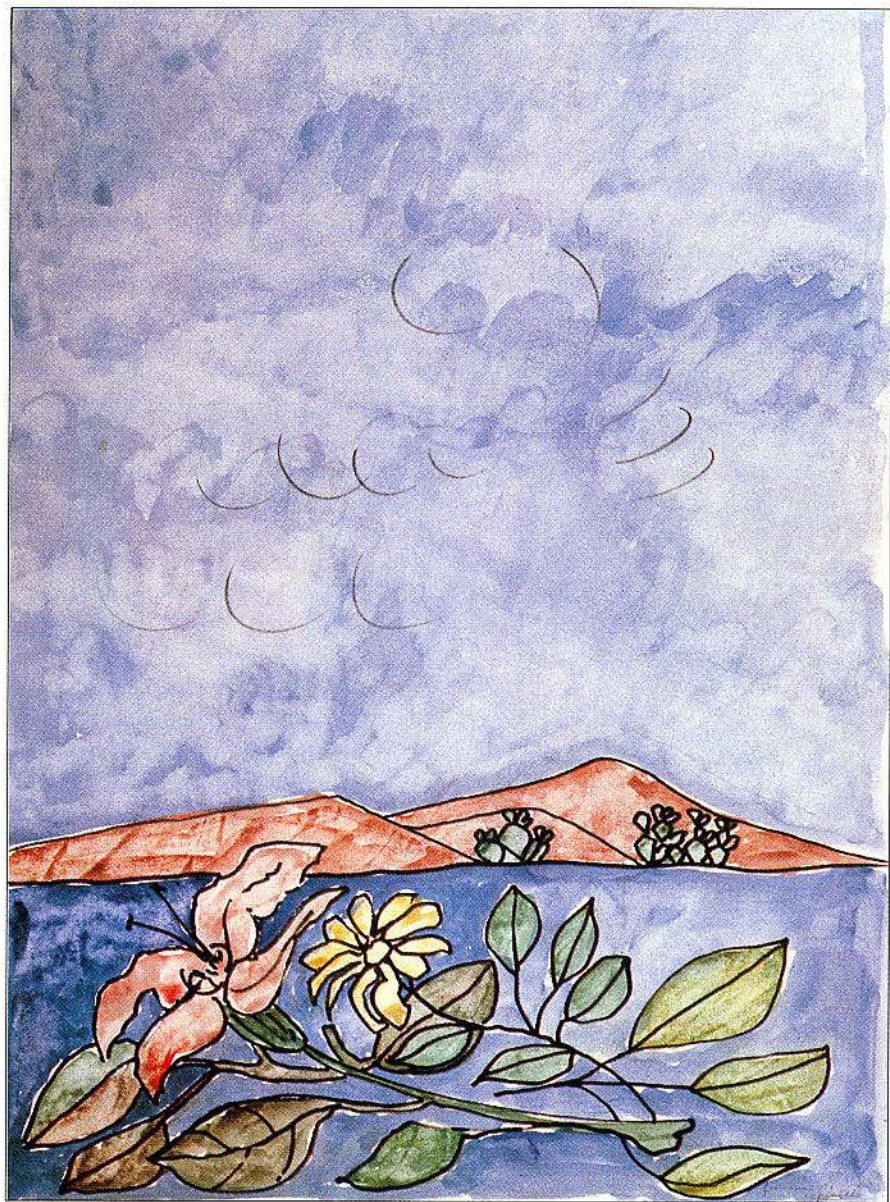
This requires for every industrialized Country to choose an adequate research policy, that is today the most important strategic factor of its industrial competitiveness and, I would say, of its own defence.

Also from this point of view the single market can represent a good occasion for the European Countries and Italy, allowing the starting of common research programmes, avoiding mistakes, stimulating industrial and technological cooperations and increasing collaboration among Industry, University and Research Centres.

Community programmes such as ESPRIT, BRIDE, RACE, ECLAIR, as well as the international technological cooperations (EUREKA), are already very important to present the European industry as ready to compete, in terms of innovation, on the world market, and will be further developed with the realization of the single market.

This is really necessary, since, notwithstanding the progress made in the last few years by the European Countries and Italy in the research and modernization, the gap with the economically strong areas of the Atlantic and Pacific is still big.

The expenditure for research in the United States and Japan is in fact about 3% of the GNP, while within the EEC it is not even 2%. And Europe is also at a disadvantage on the account of the number of researchers, that is definitely lower than that of those Countries,



Francesca Gagliardo di Carpinello: *Still-life*, mixed technique cm. 50 x 70 (1988)

transferring the results to the field of application still remains. I think also our Armed Forces can realize it.

A serious engagement in the research was undertaken in the last few years by the industry, whose expenditure for research increased — as shown by a survey carried out by the Confindustria — by 13.2% in 1986, by 15.2% in 1987 and by 21.3% in 1988.

But in this field industry cannot do everything by itself. In all industrialized Countries this is a field in which the synergy between the private and public sectors is maximum and this is the way our Country has to go to strengthen the economic development, to increase employment, to be successful in international competition.

Then I think that also the Armed Forces feel this need. In fact they need more and more efficient and sophisticated products and systems, that only a Country, including within its priorities research and modernization and a Country that adopts policies able to realize them, can supply.

Armed Forces and industry in the common interest for research can find a meeting point and a mutual spur to develop and to allow the Country to take all the new opportunities supplied by the European integration.

Ing. Sergio Pininfarina

All the European Countries have to keep the pace: so the single market is an occasion that will turn into a necessity. In fact, those who do not adapt themselves in time, will not only run the risk of getting no more space on a wider market, but even of losing space on their own national market.

and the situation is even worse as concerns the technological balance, that shows a considerable active for the United States and a considerable passive for the EEC Countries.

Under these conditions, the research policy of our Country seems not to meet the needs.

It is true that in the last few years the Government turned more attention to the problems of the promotion of research, both basic and applied. Yet, the problem of the lack in public resource and the difficulty in starting a constructive dialogue among all researchers and in

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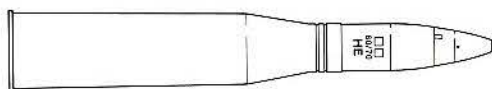
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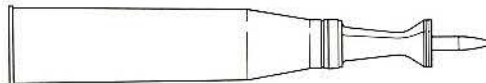
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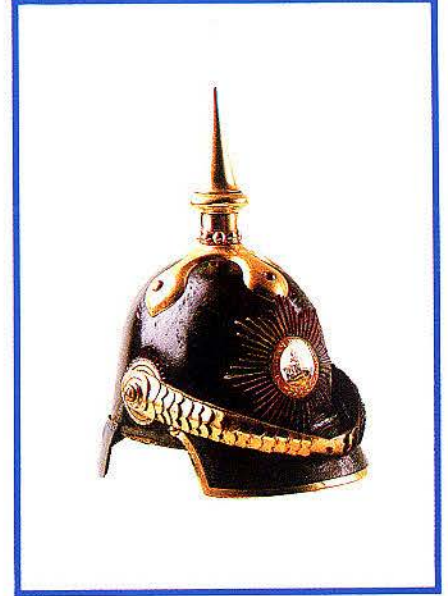
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THE PROBLEM OF DEFENCE IN ITALY

The particular characteristics and the importance that the Constitution ascribes to the Armed Forces as essential institutions of the state organization, as well as the specific link established by the "Fundamental principles on military discipline" with the Constitution itself, sanctioning the rules of action, life and behaviour of the military structure, represent the particular sources of legitimation of the military instrument.





Also the main task of the Armed Forces, that is the national defence, has a constitutional origin. The defence policy that Italy could adopt, defining, in consequence, also its role and international responsibilities, should, at least in theory, be chosen among the following options: **unarmed neutrality, armed neutrality, alignment and non-alignment**. But the solution is bound and subordinate to the careful consideration of some basic constant factors: the geostrategic position, the resources, the international politico and economic bonds and agreements.

So, discarded **neutrality**, impossible to be proposed because if 'unarmed' it doesn't guarantee security, and if 'armed' can guarantee security only at expenses that cannot be met, the choice is between alignment or non-alignment.

For a medium powerful nation, such as Italy, that is rich enough in human resources, but unable to be self-sufficient because of the lack in natural resources, and whose industrial development is mainly based on the credit of the trade balance, the choice is only one: peace can be achieved only co-operating with partners our Country shares political, economic and social interests with.

Stronghold of our military policy, now worldwide accepted, could be just the Atlantic Alliance, whose strategic doctrine, based on the concept of flexible reply and advanced defence, had up to now represented the inspiring motive of the national defensive organization. The adoption of such a conception is, therefore, a consequence of those reasons that, then, led to look for security in a military political context that, in the field of common defence, could allow the safeguard of the national interests.

So, it is now unquestionable that the **NATO is an alliance among independent, free and sovereign countries, guarantors with solidarity of a rigorously defensive and geographically limited military pact, that can be held only if each country entirely performs the engagements freely undertaken.**

In order to allow all this, every Country must rely on a defence instrument, whose credibility must be assured both in institutional and operative terms.

MAIN PROBLEMS

The Italian defence apparatus must be able to perform the following tasks:

- show clearly its defence ability so to avert, deterring, the starting of armed controversies;

- actually show the Italian will to take its responsibilities within the Alliance;

- facilitate the recognition of the active role of Italy from the other Mediterranean Countries.

But first, its effectiveness needs the solution of some basic juridical and operative problems. To the first group belong those due to lacks in the regulations establishing the working of the top-level political-strategic management, of the technical-military management and of the operative components of the military instrument; to the second group belong those operative problems linked with the emerging functions, to be ascribed to our defensive organization, and with the new tasks that should be assigned to the Armed Forces.

JURIDICAL PROBLEMS

The defence policy can be seen as the whole of the institutions, decisions and activities our regulations establish for the safeguard of the Country. The "political" order concerns the competence assigned by the Constitution to the Head of State, Parliament, Government and



Supreme Council of Defence. All together these organs form the political-strategic top-level management. Therefore, their task is to organize, prepare and elaborate the defensive strategy of the Country, that is not only military defence but global defence, in which all political, economic and social forces of the nation participate.

The problem of the link and of the coordination between political power and military command of the Armed Forces comes from this premise.

The juridical duties of the top-level political-strategic management are established by the Constitution: in art. 87, for the President of the Republic, who is in command of the Armed Forces and chairs the Supreme Council of Defence; in articles 80 and 78, for the Parliament, that deliberates the state of war and grants the Government the powers necessary to its direction; in art. 71, for the Parliament, that exerts the legislative initiative, referred by the Constitution itself. As concerns the Supreme Council of Defence, law n. 524 of 28 July 1954, defines it as the organ within which is the tightest link among the Head of State, the Government and the military top management.

Is the juridical picture enough? The responsibility of a top organ, acting in a democracy that refuses war as a way to solve international controversies, should explicitly concern the goals of the defence policy, the level of security to be achieved, the amount of resources to be destined, the coordination and control of the various sectors concern-

ing the national defence and the mobilization of the Country's war potential.

So a clearly limited and organized structure, would be necessary that could be even based on a **political organ**, having more decisional power, supported by a **technical organ**, able to make proposals, that can be turned into operative actions.

The technical-military top management acts at an immediately subordinate level and, according to the instructions of the political-strategic top management, takes care of the preparation of the Armed Forces and the direction of the operations.

It forms a complex organization, articulated, like in all countries, in two separate branches: the first, the technical-operative one, made up by the General Staffs; the second, technical-administrative, made up, in Italy, by the Secretary General/DNA, by the General Directions and by main offices of the Ministry of Defence. Also the technical-industrial bodies of the defence belong to the second branch.

The characteristics of the decisional technical-military organ are a big problem in all Western Countries.

In Italy, this sector is mainly regulated by some decrees (D.P.R. 1477 and 1478 of 18/11/1965), by the law n. 200 of 8 March 1968, that introduced the Committee of the Chiefs of General Staff as the minister's maximum consultative organ, and by the law n. 167 of 9 January 1951, that established the Superior Council of the Armed Forces.

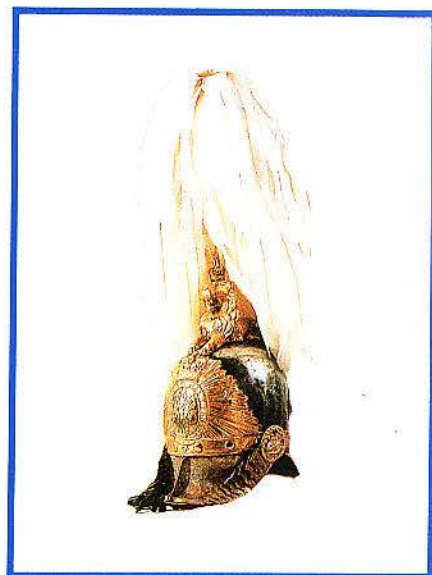
The problems to be solved are mainly two: the individual or collegiate characteristics to be attributed to the management and a more realistic distribution of functions between Committee of the Chiefs of General Staff and Superior Council of the Armed Forces.

All Western Countries chose, for the top-level management, an in-

termediate solution, avoiding both the risks of the centralization of authority and powers and the difficult working of a collegiate organ acting on the principle of unanimity.

As concerns, in particular, the Superior Council of the Armed Forces, the organism could develop itself towards a more marked technical-administrative specialization in the sector of contracts, by giving its opinions a compulsory character. Such opinions could also become substitutive of those of the Council of State, in case the representative of this assembly, within the Superior Council, expresses his assent to the decisions; this would be very useful for the simplification of the bureaucratic passage.

Another juridical problem to be solved is the regulating order to give to the Armed Forces by law: the most recent law is that about the Army, dating back to 1940. So, without an up-to-date regulating order, it seems very difficult to pool all political, technical and economic efforts for a better utilization of the resources to be destined to defence. On the other hand, the changed social reality requires the establishment of new relationships between



the organs of the State and citizens, basing on precise and unequivocal laws.

OPERATIVE PROBLEMS

The series, even if very synthetic, of the problems to be solved is not complete since, to those already mentioned it is necessary to add the operative problems, that directly affect the efficaciousness of defence. First of all, we refer to the political-military situation that changed, since the previous vulnerability increased, and secondly to the new tasks assigned to the Armed Forces in the social field.

As concerns the first aspect, it is easy to notice an increased vulnerability of the NATO south side as a consequence of two factors: qualitative increase of threat on the north-eastern border and greater instability in the Mediterranean area.

The threat increase is due to the strengthening of the enemy opposing powers, that is the result not only of the natural process of modernization that took place in the units of the Warsaw Pact in the last years, but also of the recently increased importance of such powers. The change of trend, also supported by the missile deployment and by the most up-to-date air vectors, makes us think that, from a strategic point of view, the eastern bloc turned a

growing interest to the NATO southern area with respect to the past, maybe because this is considered easier to penetrate.

But this outlook could change in the context of the so longed for process of balanced and gradual disarmament.

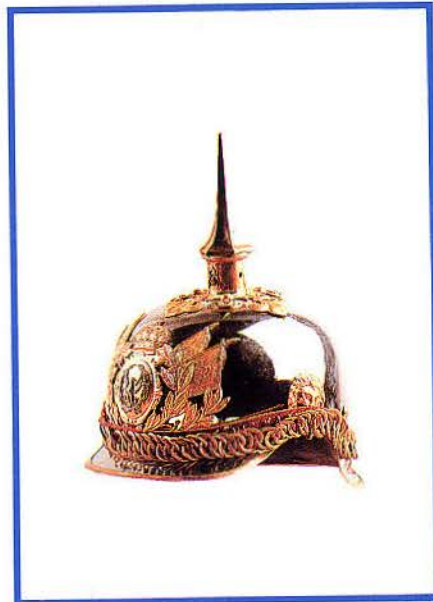
Yet, until this process makes some steps forward, it is necessary to think of this threat with its potential and effective characteristics.

The second factor — the greater instability in the Mediterranean area — is a consequence of the high quantitative increase of forces in potentially hostile countries, some of which have means and equipment that are in excess with respect to their real defence need.

Moreover, the new tasks are those established, for the Armed Forces, by the "regulations on principles", concerning the support to the safeguard of the free institution and to those populations suffering calamities; new tasks will also be established through some measures, now under examination, such as the famous D.D.L. on "Civil Defence". In other words, the Armed Forces have to be ready to intervene quickly, also in social fields, with forces and equipment being qualitatively adequate and quantitatively numerous.

GOALS ALREADY ACHIEVED AND DEFECTS TO BE ELIMINATED

Because of the threat and of the more and more insistent call of the nation to the utilization of the Armed Forces' scarce resources in the social field, the '70s saw a radical change of the national military instrument, through a process of reorganization concerning the three operative components and the technical-industrial component of defence. The growing importance of the technological development, with the high increase in the costs of acquisition and utilization of arms and equipment, caused in fact a further decay of efficiency, that is more evi-



dent in those sectors depending directly on electronic technology. But the reorganization, that among the other things, aimed and still aims at rationalizing the structures to retrieve resources to be destined to the modernization, is subject to the need to complete those programmes decided at the beginning. This is necessary both to perform adequately the most important task — the defence of the north-eastern border — and to rely on more forces on the remaining national territory, in order to cope with the new needs of the Mediterranean area.

Moreover, special laws concerning qualitative reduction, hardly achieved their goals in the fixed terms, because of lacks in financing. Inflation and the following price rise slackened the process of modernization and this could cause a delay in carrying out the programmes of some years after the '90s.

But the incomplete realization of the programmes, that are considered as necessary to compensate, with an increase in quality, the decrease in quantity that took place during the reorganization, does not allow to cope adequately either with the threat envisaged in 1975 or, at least, the present one.

The weak sectors, that mostly af-





fect the land operative capacity — the most important to face the direct pressure of the opposing forces — are the air and antitank defence, the target acquisition, the watch of the battlefield and the command and control.

Moreover, it is important to stress that in 1975 the peninsular and insular national territory was penalized with respect to the north-eastern area, because the resources available and the estimation of the operative capacity of the Warsaw Pact countries did not allow a further reduction of the units to be deployed in the North. On the other hand, considering the local situation, the threat in the Mediterranean area was estimated in a limited number of "raid" actions.

From 1975 to now, this menace, yet being considered in the context of "raids" (invasions are not envisaged), has become more and more serious because of the possibility for the potential attackers to lead more actions of this kind at the same time.

So, in order to exert a better control on the territory, it would be necessary to count on more forces, such as at least three elementary Big Units at brigade level, to deploy respectively in Sicily (for the defence of the islands and of the Straits of Messina), in Sardinia and in the southern area of the peninsula (to guarantee both the Ionian and the Tyrrhenan sides)*

In other words, it seems absolutely necessary to give **credibility to the operative instrument**. And in order to get all this, it would be necessary

to achieve at least the minimum goals established with the reorganization project. The global dimension of the instrument, the qualitative level, the balancing of the single components, the number and kind of equipment and, consequently, the technological choice for the material acquisition, must be estimated according to these minimum goals.

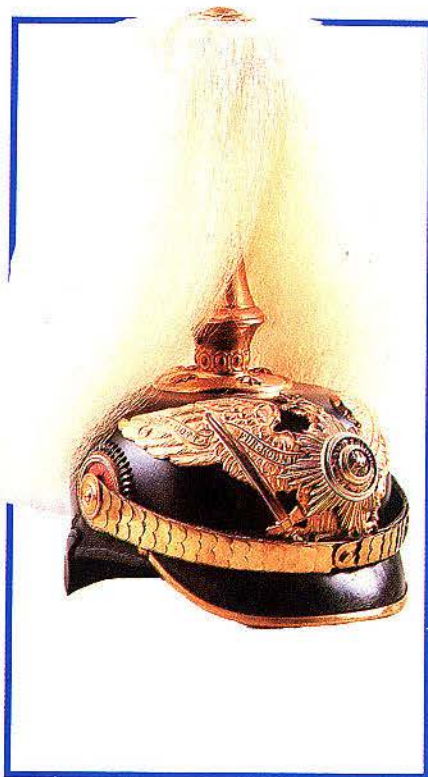
On these choices depend also the criteria for the reorganization of arsenals and plants, in sight of the intervention capacity they must be supplied with.

In fact, given for granted the need to keep a military industrial organization, necessary also to control private industry, and to rely, under any circumstance, on a certain autonomy free from conditioning, it is necessary to wonder how

to proceed on the way of modernization. In this connection, the main goal could be a modern and flexible industrial structure, able to adapt itself even to the working systems of the most sophisticated materials. So, in this sector the most efficient solution would be the building of plants, specialized in the integral revision of the systems of arms.

SECTORS OF INTERVENTION

The main problems of the defence policy are substantially imputable to the concepts of credibility and efficiency of the military instrument in all its aspects: from the normative sector to that of social services, to the technological choices, to the



moral and cultural motivation of personnel, to the military condition, to the planning.

The sectors of intervention are many, complex and articulated. In a very synthetic picture, it is possible to mention just the main ones.

THE INSTITUTIONAL SECTOR

A defence policy able to supply the image of a country standing out on the always changing surrounding scenario adequately, and so, able to discard, for its own security, external and internal attacks, cannot ignore the precise establishment of relationships among political power, military command and economic and industrial organization of the Country.

And since such relationships play

a decisive part and the principle of security is based on them, these must be legitimated through juridical instruments and through an organization able to coordinate the political, economic and social components of the nation, for an adequate global defence.

From this premise arises the problem of the link and coordination between political power and military command of the Armed Forces, that as legitimate expressions of the State authority, pursue the same aim.

This gives rise to the need to clear and define the responsibility of the political-strategic top-management, in a harmonic picture of the respective constitutional duties of the various organs forming it, and to harmonize, in the respect of the unavoidable operative autonomy, the

sphere of influence of the organisms making up the technical-military top-management.

As regards the second one, it would be advisable to take into consideration the experience of the other western countries facing the same problems. Only this way it will be possible to reach the balance among the duties of the Committee of the Chiefs of General Staff, of the General Staff and the Secretariate General/DNA and then of the Superior Council of the Armed Forces, also in order to harmonize the needs of the technical-operative and administrative sectors of the military instrument.

Thus, not even the need to legitimate with adequate regulations the global order of the Armed Forces can be put off.

THE SECTOR OF SOCIAL SERVICES

The need to rely on an organization able to face the new tasks assigned to the Armed Forces by the "Regulations on principles" and those established by the D.D.L. on Civil Defence, requires:

- to establish more stable links, according to different levels of responsibility (State, Region, Province), between civil and military authorities;
- to rely on a logistic and technical-administrative organization, able to meet the needs both of the Armed Forces and those coming from domestic emergencies (intervention for public calamities, cooperation in the safeguard of free institutions);
- to improve the quality of social services (in the information, certificate and health sectors) in favour of citizens, resorting to informatics.

THE SECTOR OF MATERIALS AND EQUIPMENT

This series of problems concerns the supply and utilization and is strictly connected with the problems of research, development and production. As concerns the defensive





instrument that must always be kept efficient, and the careful examination of its efficiency with respect to costs, it is possible to establish both the technological level of the materials and equipment to be introduced, and their quantity within the single components. The technological level and the quantity also depend on the real possibility to guarantee their technical reliability and to rely on both the operative ability necessary to their maintenance, and the indispensable spare parts supply.

That being said, it is possible to define the functions and tasks to assign to the arsenals and defence plants, in the sector of production and maintenance.

A particular notice is worth the utilization of the materials and equipment within the Armed Forces, that postulates a massive resort to informatics systems for the automatized running of parks, as well as a deep examination of proceedings and a more marked decentralization of the administrative authority in the sector of expenditure (increase of the limits granted to commanders).

THE SECTOR OF PERSONNEL

The credibility of the military instrument would not exist if it were not the result of a highly motivated personnel. But personnel motivation depends on many factors, above all the moral and cultural ones.

As concerns the moral factor, a relaunch of the ideal motivations seems necessary, that is the search

for security and identity, above all from young people. In this connection, an important step forward was made also with the institution of the military representation that, even if it showed some functional excesses, has also contributed to confirm both the right to the presence of the military institutions in the society of the '90s, and their really democratic spirit. This took place through the establishment of relationships that, if on the one hand confirmed the equal dignity of the individual, on the other are not contradictory to the fundamental principles of discipline and hierarchy of competences.

At most, the problem is to start a more and more responsible participation.

As regards the cultural aspect, a more careful reconsideration of the military reality, is necessary both as social reality — and so expression of the symbiosis between the military and the other state institutions — and as peculiar military condition characterizing its members.

It is in this prospect that the cadres' claims, as regards in particular remuneration and pension treatment and the right to an apartment, must be analyzed. In fact they are citizens, who even if for free



choice, are subject to particular employment conditions.

Also the citizens' claims can be seen in the same picture.

The latter, in fact, being subject to compulsory military service, must find in it the real possibility to make experiences able to reconfirm and strengthen the spirit of responsible and aware participation supporting them.

THE SECTOR OF PLANNING AND PROGRAMMES

But the interventions above mentioned would not be feasible or even effective, if they were not considered within a forecast mechanism through which it is possible to define the synthesis goals. These goals, identifying the qualifying elements of the pursued instrument of defence, should above all indicate the direction where all efforts should be directed. In other words, it would be necessary to consider as unavoidable the decisional procedure already defined by the Ministry of Defence and called technical-operative planning, that should become the usual instrument, for both political and military members, to make long-term decisions, and would become the only point of reference of the accomplishments.

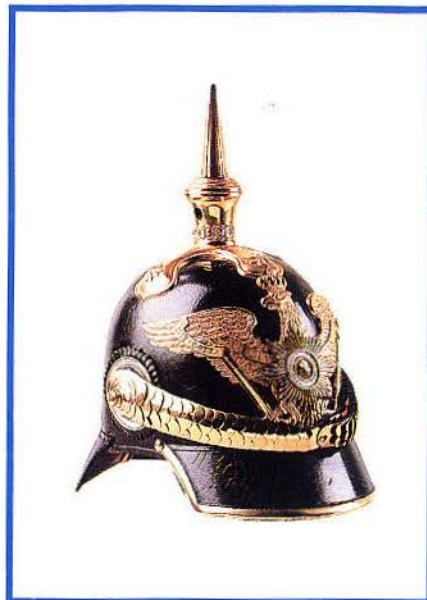


POSSIBLE INTERVENTION INSTRUMENTS

The necessity to allow Parliament to consider the expenditure for the maintenance of the military instrument, taking this way the responsibility of the risks connected with the decisions taken, and to allow, at the same time, the top-managements to fulfil their mandate, requires to resort to modern and flexible legislative instruments and to measures able to create a more complete osmosis between the military world and civil society.

Above all two laws would take on a particular importance: one establishing more precisely the shape and working of the political-strategic top-management and another regulating and programmatic bound with the ten-year technical-operative planning. Such regulating law would also unify all organisms of the Ministry of Defence in a single cadre, defining clearly the relationships between the technical-administrative bodies and the Armed Forces, and would also indicate the goals to be achieved, legitimating not only the number of the staff necessary, but also the relative careers.

Among all measures aiming at



establishing this symbiosis between the military sector and the administrative organization of the State, there should be the establishment of a link, and of stable interlocutors, between the Armed Forces — above all the Army — and the state authorities. Such measure, together with a better organization of the social services that the Armed Forces already supply — through district and health organizations — would contribute to establish a more efficient Parliament-Armed Forces — Country circuit. This could be the answer to the demand for more efficient social services made by the Country to the Armed Forces.

CONCLUSIONS

A synthesis of the above could be represented by only one concept: the **credibility of the defence instrument**. But the credibility implies at the same time a goal and a serious and constant engagement aiming at rationalizing and utilizing adequately the resources destined by the Country to its own defence. So, it can be guaranteed only through the determination and carrying out of a programme rich in legislative and organizational initiatives, going from the reorganization of the nor-

mative sector by which the military institutions are legitimated and supported in their work, to the relaunch of the image of the Armed Forces in the Country; an image that is based on the moral aspect that, on its turn is the base of the staff motivation — both of the cadres and of the conscripts — and on a new and more pertaining cultural view. This should not present the military instrument as means of offence, but as an unquestionable reality, whose main task is the defence of the territorial integrity of the State.

This gives rise to the double need for an up-to-date, clear and unequivocal normative body and for an instrument of defence, adequate to the international situation, as well as the need for the reliability of the military instrument: against the menace to be faced with the allies and in front of the national public opinion.

Gen. Francesco Cervoni

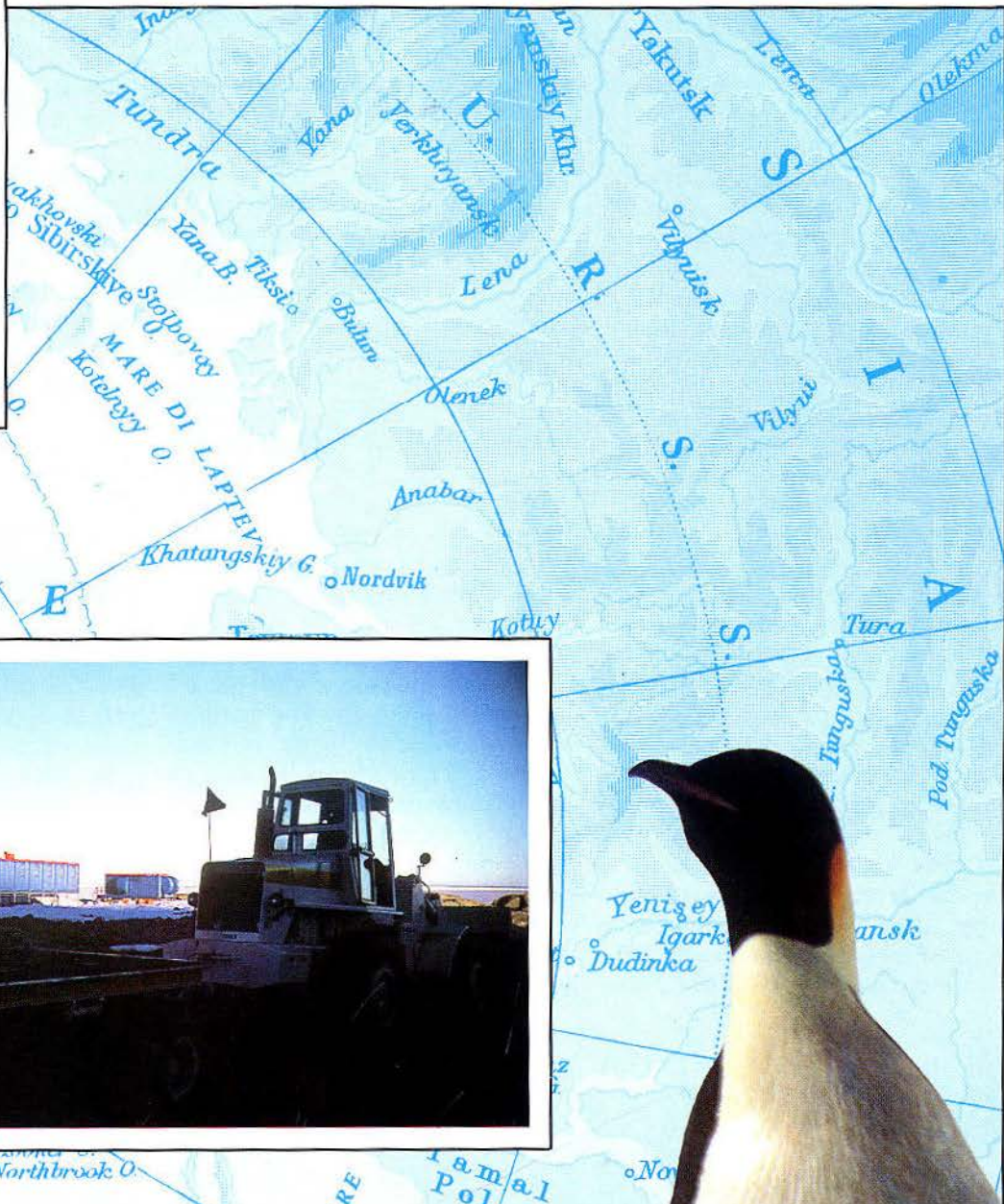
(*) The last alternative could be to give complete autonomy and full mobility to at least some of the big, already existing units, in order to allow their rapid moving and intervention on the whole national territory. Yet, also this compromise solution would require adequate extra modernization programmes, to be financed completely.



THE ITALIAN RESEARCH PROGRAMME

ANTARCTICA







THE ANTARCTIC TREATY

The Antarctic Treaty, signed in Washington on December 1, 1959 by the twelve countries that carried out scientific activity in Antarctica during the 1957/58 International Geophysical Year, has as main purpose to assure that "in the interest of the whole mankind Antarctica goes on being always used only for peaceful purposes and is not turned into theatre and cause of international strife". The Treaty's regulations apply to the whole area south of a latitude of 60 degrees south.

Later, 25 more countries joined the Treaty, and among these Italy in 1980.

In order to achieve its main purpose the Treaty states among other things, the delimitarization and denuclearization of the territory. But as sole exception, it is allowed the

employment of military personnel and equipment both for scientific research and for any other peaceful purpose.

In order to stress more the concept of peaceful use of Antarctica, the Treaty also states that "freedom of scientific research and the cooperation to this end will go on, as applied during the International Geophysical Year".

The twelve signatory countries and those that joined the Treaty later, that according to art. IX, paragraph 2 of the Treaty, showed their interest in Antarctica "carrying out important activities of scientific research in this area, such as the building of a scientific station or the sending of a scientific expedition" have the right to send their own representatives to the consultative meetings provided for by paragraph 1 of art. IX. The meetings of the Consultative Parties are usually held every two years in order to exchange information, to consult on subjects of common interest as well as to propose, consider and recommend, to the respective governments, measures aiming at assuring the respect of the principles and the pursuit of the goals.

ITALY AS CONSULTATIVE PARTY TO THE TREATY

In April 1987 the Italian Government notified its formal request to obtain the status of Consultative Party. The recognition took place on the occasion of the XIV ordinary meeting of the Treaty, held in Rio de Janeiro in October 1987. With the joining of Italy, and at the same time of the Democratic Republic of Germany, the number of the Consultative Parties increased to 20, on a total of 37 member Countries.

Two important Conventions are inserted into the system of the Antarctic Treaty, one concerning the protection of the Antarctic seals (adopted in 1977 in London) and the other about the preservation of the sea resources living in Antarctica (adopted in 1980 in Canberra).

In June 1988 the international negotiation on the regulation of the exploitation of the mining resources in Antarctica ended in Wellington. The Convention's final text contains the regulations necessary to guarantee in any case the defence of the Antarctic environment and of the associate ecosystem and the compliance with the rules of the Antarctic Treaty. In order to strengthen the bonds with the Treaty, it is envisaged that within the Convention's organs are considered member by right those Countries already being Consultative Parties and the next to be, as long as they keep the right to such title. Also Italy falls in the first group.

THE INTERNATIONAL PICTURE

International cooperation is one of the Antarctic Treaty's inspiring principles. In fact art. II says that "freedom of scientific research in Antarctica and the cooperation to this end will go on", while art. III supplies indications on how to encourage such cooperation.

Almost all consultative member



countries of the Treaty continuously carry out scientific activities in Antarctica and 17 of them have permanent working bases, manned throughout the year.

The United States and the Soviet Union stand out also in Antarctica for the importance of their programmes.

Particularly the United States, with an annual budget over 100 million dollars, predominates in almost all disciplines for the quantity of equipment, mobility and volume of activity, the scientific one included. One of the American bases manned throughout the year is the Amundsen-Scott base, located at the South Pole. The Soviet Union stands out for the number of permanently occupied bases (eight) and for the winter population (300). Among the other countries, the programmes of France, the Federal Republic of Germany, the United Kingdom as well as those of Australia, Japan and New Zealand are particularly important. The activity of South American countries is mainly concentrated on the Antarctic peninsula.

The collaboration among countries is often a necessity, considering the particular logistic situation, both for possible emergency problems and for the high cost of the operations. But some collaborations also started on the basis of mere scientific interests. Beside bilateral cooperation agreements, such as those between the United States and New Zealand, Sweden and New Zealand, Norway and the Federal Republic of Germany, Argentina and the Federal Republic of Germany, there are also multilateral agreements such as, for example: the IAGP (International Antarctic Glaciology Project) that employs scientists from Australia, France, the United Kingdom, the United States and the Soviet Union.

The sector in which the largest number of joint cruises was organized is the oceanographic one. In particular the Federal Republic of Germany offers about 25% of the places available on the Polarstern ship to foreign scientists, including those

coming from developing Countries.

Other Countries that cannot rely on sufficient resources, send their researchers to foreign bases; this is the case of Belgium, Sweden and Norway that collaborate above all with the United Kingdom, and of the People's Republic of China, that in wintertime sends its scientists to American, Soviet or Australian bases. Recently also Sweden started its own programme with the aim of joining the Antarctic Club.

As to Italy, notwithstanding all the limitations due to our recent autonomous presence in Antarctica, any possibility for an international collaboration has been looked for from the beginning. Excluding the agreement signed with New Zealand, country that in the past offered its collaboration to our researchers, agreement that was due to our need to rely on a support base in that country for all logistic aspects of the national programme, the cooperations in progress or under examination are mainly based on personal relations among researchers. Among the latter we can mention for example:

- the joint programme of La Sapienza University of Rome and the United States Antarctic Program in the field of atmospheric physics and in particular on the ozone reduction, which considers the installation of an optical radar (Lidar) made in Italy in the Amundsen-Scott polar base;

- the agreement with the Ohio University for the exchange of weather data;

- the Italian participation in the EPOS project (European Polarstern Study) in the field of oceanography, within the European Science Foundation;

- the collaboration of a group of researchers from the CNR (National Council for Scientific Research) with American colleagues, to study the haemoglobin of the Antarctic fish.

For the future, some contacts are also in progress with the United States as concerns the logistic aspects, the use of air connections with the McMurdo base, and the

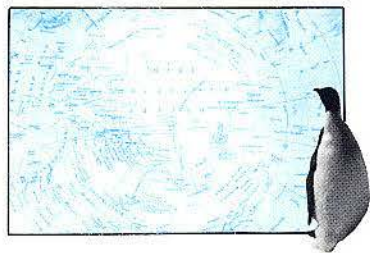
scientific aspects, oceanography and earth science; with the French, who proposed the European partners a joint programme for the use of the base in Dumont d'Urville, to be developed with an airport, and a short-term programmes in the field of atmospheric physics; with Brazil for research in the sector of geology.

Within the international scientific organisms or associations a very important role is played by the Scientific Committee For Antarctic Research (SCAR). SCAR is the scientific committee of ICSU (International Council of Scientific Unions) whose task is to start, promote and coordinate the scientific activity in Antarctica. Members by right of SCAR are the national scientific organization members of ICSU as representatives of the scientific community of the Countries that carrying out continuous and independent research programmes in Antarctica, established a National Committee to keep in touch with SCAR itself.

THE PERMANENT BASE

The site chosen for the installation of the permanent base, called "Terra Nova Bay Station", is a place on the Northern Foothills coast area of Victoria Land in the Ross Sea, point of coordinates Latitude = 74° 41' 42" South and Longitude = 164° 07' 23" East.

The realization of the base structures is a very important part of the technological development programme. In fact, for its geographical position, more than 400 km from the other bases of the area and about 10 days' navigation from the nearest ports, its planning needed the use of the most advanced technology in order to guarantee its maximum reliability under particularly hostile weather conditions (winds blowing at more than 200 km/h, minimum temperatures in the order of -50°C). Suitably insulated modular elements were us-



- long distance telecommunication system via satellite (Satcom) linked with the INMARSAT net, allowing the telephone telex traffic with any telephone and telex subscriber all over the world.

SCIENTIFIC AND TECHNOLOGICAL RESULTS

Within the scientific and technological research programme in Antarctica, three campaigns centred on the general purposes of the pluriannual programme passed by the CIPE (Interministerial Committee for Economic Planning) have taken place up to now.

Fields of these activities are:

- cosmogeophysics and cosmogeochemistry;
- atmospheric physics and climatology;
- earth science;
- oceanography;
- biology and medicine;
- environmental impact;
- technological research.

The need for an articulated programme of geophysical exploration of the geologic structures off the continental shelf was also stressed.

COSMOGEOPHYSICS AND COSMOGEOCHEMISTRY

The low concentration of steam and the high thermal stability of the atmosphere make Antarctica a very good place for the study of the background cosmic radiation. In order to measure, or at least to fix an upper limit, the value of the background cosmic anisotropy and to test some observation techniques to separate the astronomic effects from the atmospheric ones, the OASI project (Antarctic Submillimetric Infrared Observatory) was developed, contemplating the installation of a three-meter infrared telescope fitted with a photometric system operating at the temperature of liquid helium (about 0.3° K).

With the help of a one-meter parabolic flow collector it was possible to carry out some tests on the possibility of measuring the background cosmic radiation at an angular scale of 1-10 degrees.

ATMOSPHERIC PHYSICS AND CLIMATOLOGY

The creation of the net of automatic weather posts, with telecast data, employing stations able to work autonomously even in wintertime, allowed the collection of the data necessary for the weather characterization of the site. The data collected have also been regularly sent to the American base of McMurdo for a collaboration with the Ohio State University.

Through the use of sound probes it was possible to make measurements of the planetary boundary-layer. The observation with a SODAR mono-channel instrument showed a strong convection (vertical speed of even 4.5 metres per second) due to very high thermal gradients coming from the radiation absorption in the deglaciated areas. The use of a triaxial probe with Doppler test in real time, beside examining closely the study of the convection, allowed to supply an accurate description of the catabatic winds.

A second closer-meshed net of

ed for its realization. One-floor buildings on a total working area of 670 m², are placed on "pilots", in order to avoid the roughness of the land, reducing the earth moving operations as much as possible, and to decrease the load on the structures due to snow accumulation. The buildings are fastened to the soil through steel tie-beams.

The base is fitted with the following equipment:

- automatic weather stations to measure air temperature and humidity, atmospheric pressure, wind direction and intensity, global solar radiations. The data collected are broadcast locally and in Europe via satellite (ARGOS system);
- HF receiver for weather charts sent via radio/facsimile;
- radiosonde system to get weather data at high altitude through the launching of sonde balloons;
- local reception system, via ARGOS, of the data sent by automatic weather stations;



small weather cabins, was installed around the base, as well as Brewer spectrophotometer to measure the columnar content of ozone.

The data collected about the atmospheric particles will allow the determination of the dimensional distribution, the mass concentration and the optical characteristics of aerosol. The measurements of the solar irradiation with a solar photometer permit to establish the optical thickness of the particles and so the parameters of the atmospheric turbidity; also the columnar content of ozone will be obtained, as well as data about the ozone concentration near the soil.

During the 1987-88 campaign an optical radar (Lidar) developed at the University of Rome was installed in the Amundsen-Scott South Pole Station. The Lidar is kept in operation, within a collaboration with the United States Antarctic Programme, by the staff of NOAA (National Oceanic and Atmospheric Administration) throughout the year, and the data collected are sent to Rome via satellite. Purpose of the measurements is the observation of the particle content of the atmosphere, of the distribution of clouds and of the effects of these constituents on the ozone concentration; these measurements are very important if carried out in winter-time, when the "ozone hole" takes place.

Another Lidar, made by the IROE Institute of the CNR in Florence, that worked in summer-time at the Terra Nova Bay base, supplied a long series of measures about the vertical distribution of clouds and aerosol as well as on their variability.

EARTH SCIENCE

Geological-petrological research in the igneous and metamorphic basement of the Terra Nova area permitted to distinguish 3 lithostratigraphic complexes in the Wilson Terrane — high grade migmatic granulitic (Priestley schists AUCT), low grade migmatic granulitic (Priestley formation

AUCT) — with plutonic intrusives, above all chalcohalines of different composition, leucogranites and tonalities with minor gabbros and ultramafic complexes, belonging to the so-called Granite Harbour Intrusives. These complexes have been charted at the scale of 1/250,000 in the areas between the Campbell and David glaciers.

The data collected on the ground have been integrated, in the laboratory, with the examination of the material collected.

So it is possible to show a very original model of tectonic-metamorphic-magmatic evolution of the Wilson Terrane. With respect to the panorama offered by the previous literature that considered a monolithic evolution (Ross orogeny) this one is characterized by having discovered at least three orogenic cycles, going backwards in time, that are:

- tectonics, low grade metamorphism and plutonism of Cambrian-Ordovician age (Ross orogeny);
- tectonics, high grade metamorphism (low pressure amphibolite facies) of unknown age;
- high grade metamorphism in medium and high pressure granulitic conditions, of unknown age.

During the third expedition a

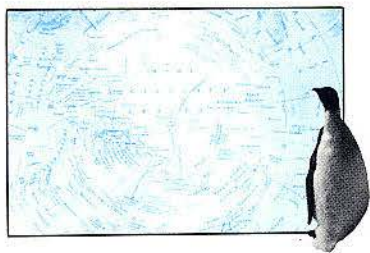
research was also started, aiming at a first evaluation of the glaciometamorphic aspects.

The volcanologic surveys were carried out both in the Mesozoic basaltic expandings (Ferraro dolerites) and in the numerous neogenic-quaternary volcanoes of the area, located between the Campbell and Aviator glaciers. As regards the latter, it came out that it is possible to distinguish two phases of volcanism: one having an alkaline character with abundant differentiated products, linked with the Overlord Mountain and the surrounding effusive centres, and the other, more recent, having an alkaline character too, but mainly basaltic, typical of the Melbourne Mountain, but also common in a large area in the north, where it covers the products of the Overlord Mountain. Both phases seem to be linked to a recent stretching tectonics, developed with faults having a North-South direction. During the last expedition another research was started, aiming at testing the geothermal capacity of the area.

Research in the field of geology, glaciology and paleo-climatology led to the following results:

- reconstruction of the East Antarctic cap in the Terra Nova Bay





area and of its relations with the Ross platform;

- identification of three different glacial complexes and of traces of prepleistocene glaciations;

- dating and numerical evaluation of the main Holocene events: deglaciation, isostatic folding, variations of the sea level, faunal repopulation, fluctuation of the logical glaciers;

- detailed geomorphologic cartography of the Northern Foothills territory, with special attention to the preglacial forms and problems;

- first evaluation of the mass balance of the front variation of local and outfall glaciers;

- studies about the origin and development of the Hell's Gate floating ice platform, the process of till collecting in cold bottom glaciers and the development of the Shear moraines;

- survey on the oscillation of glaciers with front to the sea.

In the field of geomagnetism a summer geomagnetic observatory was installed and explorative surveys were carried out. The geomagnetic survey in the area of the Terra Nova Bay led to the discovery of two "highs", one north of Mt. Melbourne and the other NNW-SSE oriented, coincident with the basement of the Jurassic vulcanites of the Ferrar group. Surveys were also carried out about phenomenon of electromagnetic induction, in order to analyze the magnetovariations at high latitude and to study the electric conductivity of the lithosphere and of the Antarctic crust, and to measure the magnetic susceptibility on rocks of the crystalline basement and on recent vulcanites.

In the field of sea geophysics, aiming at the reconstruction of the geodynamic model and of the history of the Ross Sea basins, 2323 km of multichannel reflection gravimetric and magnetometric

seismic profile, were carried out, transversally to the Ross Sea and along the Western coast of the Victoria Land; it was arranged for these directions to intersect and cover an area where previously some magnetic anomalies had been noticed.

A first compilation of the collected data, integrated with other surveys made by German, American, French and Japanese researchers, makes it possible to draw the extension of the sedimentary basins inside the Ross Sea and to show the positive maximum values of the gravimetric anomalies.

OCEANOGRAPHY

As regards physical oceanography, the batimetric survey of the area of the Terra Nova Bay was carried out; this brought to the publication of a 1/50,000 thematic chart.

Four acoustic signallers that allowed to measure the horizontal and vertical component of the currents have been moored. With the use of marigraphs, it was started a research about the variations of tides, and through the utilization of multiparametric signallers it was possible to outline the hydrologic characteristics (temperature, salinity,

pH, dissolved oxygen). In the field of biological oceanography, during the last campaign, a research on plankton, benthos, nekton and fishing resources, microbiology, primary productivity was started. The results refer to the first surveys and measurements made on the spot; the following examination, in Italy, of the samples collected will allow to get complete information about the ecological asset of the area under study.

The first microscopic observations of samples of plankton showed that the area of the Terra Nova Bay is not rich with krill and that the *Euphasia Superba* is almost absent, while *Euphasia Cristallorophias* are present.

The distribution of the filoplankton biomass is not uniform under the spacial distribution aspect, while the peaks of maximum density related to time may be uniform.

As regards benthos, the survey showed abundant settlements both along the coast and offshore. Concerning zoobenthos the most important groups were: gasteropodes and echinoderms up to 25 m depth; molluscs and echinoderms up to 70 m; sponges, hydrozoans, bryozoans and echinoderms up to 400 m. It



COUNTRIES THAT SIGNED THE ANTARCTIC TREATY

(in chronological order of ratification)

UNITED KINGDOM	31 May 1960**
SOUTH AFRICA	21 June 1960**
BELGIUM	26 July 1960**
JAPAN	4 August 1960**
USA	18 August 1960**
NORWAY	24 August 1960**
FRANCE	16 September 1960**
NEW ZEALAND	1 November 1960**
USSR	2 November 1960**
POLAND	8 June 1961* - (29 July 1977)
ARGENTINA	23 June 1961**
AUSTRALIA	23 June 1961**
CHILE	23 June 1961**
CZECHOSLOVAKIA	14 June 1962
DENMARK	20 May 1962
THE NETHERLANDS	30 March 1967
RUMANIA	15 September 1971
DEMOCRATIC REPUBLIC OF GERMANY	19 November 1974* - (5 October 1987)
BRAZIL	16 May 1975* - (12 September 1983)
BULGARIA	11 September 1978
FEDERAL REPUBLIC OF GERMANY	5 February 1979* - (3 March 1981)
URUGUAY	11 January 1980* - (7 October 1985)
NEW GUINEA	16 March 1981*
ITALY	18 March 1981* - (5 October 1987)
PERU	10 April 1981
SPAIN	31 March 1982
PEOPLE'S REPUBLIC OF CHINA	8 June 1983* - (7 October 1985)
INDIA	19 August 1983* - (12 September 1983)
HUNGARY	27 January 1984
SWEDEN	24 April 1984
FINLAND	15 May 1984
CUBA	16 August 1984
SOUTH KOREA	28 November 1986
GREECE	8 January 1987
NORTH KOREA	21 January 1987
AUSTRIA	25 August 1987
ECUADOR	15 September 1987

** Signatory Countries and Consultative Parties

* Other Consultative Parties (starting date in brackets)

is important to stress the great abundance of the *Adamassium Colbeckii* mollusc, that between 25 and 70 m, often covers 100% of the bottom.

As regards fitto-benthos, there is uniformity of the vegetal associations with poor flora variety. Very often the algae covering of the rocky bottom is total.

In the field of nekton and fishing resources the first results of the capture operations allowed to recognize 10 different kinds of bony fish and also many samples of benthic macro-

invertebrates, above all echinoderms and sponges, on a total of more than 1400 samples.

As regards the field of chemical oceanography, the survey, aiming at the evaluation of chemical parameters, such as oxygen, nitrites, nitrates, ammonia, dissolved phosphates and silicates, showed up to now only a certain homogeneity in their distribution, that will be better specified by the processing of the analytic data collected.

Concerning the aspects of

geological oceanography, a research was started on morphology and sedimentology of some coast ponds, of the coast-littoral belt and of the continental shelf and slope; isotopic geochemistry of marine carbonates and their dissolution; paleomagnetism and magnetic susceptibility; aeolian transportation. Samples for national museums were also collected.

Totally 200 sea samples and 50 ground samples were collected and about 2400 km of light seismology were covered.

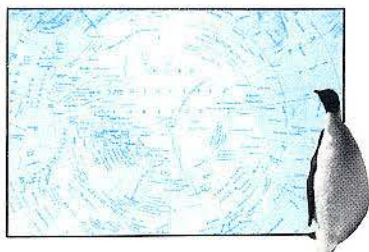
From the biogenetic carbonate samples (calcareous benthos, offshore and near the coast) it will be possible to get geochemical information (oxygen and carbon stable isotopes); geochemical surveys will also be applied to the analysis of the sedimentation rate on core and sediment samples, as well as for the dating of the Holocene bank lines examined along the coast; the discovery of important phenomena of decalcification in the shells of some carbonatic organisms suggested the starting of tests to acquire semiquantitative information about the dissolution of CaCO_3 in the Antarctic waters.

Surveys on paleomagnetism have been started correlated with those on land, and measurements of magnetic susceptibility carried out in order to establish the origin of sediments and define the correlation among rocks, moraines and sediments.

For an evaluation of the problem of aeolian transportation, considered very important for the sediment carried to the sea, because of the lack of a fluvial transportation and for the presence of strong catabatic winds in large bare areas, many samplings, lasting 12 hours each, have been carried out. This research is also important to assess the possible contribution coming from incinerators.

BIOLOGY AND MEDICINE

The biochemical research on the adaptation mechanism of fishes and birds is linked to the research carried out by the CNR researchers at Palmer Station before the start of



the national programme.

The research on the haemoglobin of bony fish allowed the refinement of five kinds of haemoglobine, later studied with diffractometric methods; also the amino-acid sequence of globin mixtures was tested through HPLC.

During the second expedition the researchers started the study of the oxygen transport system in the Emperor Penguin; tests showed some qualitative and quantitative differences in the haemoglobin of adult and young subjects.

Samples of pure haemoglobin, of mixture of globin and of CN-metHb+ from Emperor Penguins, as well as samples of the tissue of many fish species were prepared for the following test in the Italian laboratories.

In the third campaign an important result has been achieved in the field of haemoglobins, thanks to the finding, in non-endemic species, of components with functional characteristics very different from those, almost constant, noticed in endemic teleosts.

Another result, concerning the enzymatic aspects of the adaptation, is the purification and the obtainment, in crystal form, of L-glutamate-dehydrogenase of a kind of blood having no haemoglobin.

The other activities of the sector (study of fauna and flora, biology and evolutionistic genetics) were started only in the last campaign, during which it was possible to collect samples that will permit to carry out deep studies in the laboratory.

The survey on the spot showed that fauna and flora are almost uniform. The zoological groups are very few; the finding of turbellarians is very interesting, the communities seem to be very simple with many organisms of few species. The floristic-mycologic survey allowed to

EXPEDITIONS TO ANTARCTICA

FIRST EXPEDITION

Participants: 26 people aboard the "Polar Queen" ship, plus helicopter pilots and crew for a total of 42.

Departure from Genoa on October 27th, 1985.

Return to Christchurch on February 26th, 1986.

Purposes of the expedition:

- technical survey of the area in order to choose the place suitable to the installation of the permanent base;
- execution of research in the fields: earth science, atmospheric physics and climatology, oceanography, biology, also in order to acquire information useful to the planning of future activities.

Final budget: 7 billion Lire.

SECOND EXPEDITION

Participants: 70 elements (31 researchers - 23 logistics operators and 16 base builders) plus helicopter pilots from New Zealand and ship crew, aboard the "Finnpolaris" ship.

Departure from Genoa on October 22nd, 1986.

Return to Christchurch on February 26th, 1987.

Purposes of the expedition:

- construction of the permanent base, fit for habitation during the Antarctic summer, and of the meteorologic infrastructure;
- execution of a research programme in many disciplines of the sectors: cosmology, atmospheric physics and climatology, earth science, oceanography, biology, environmental impact, technology.

Final balance: 20.5 billion Lire.

isolate about a hundred stocks, a high number of which were already identified in the base's laboratories.

ENVIRONMENTAL IMPACT

A programme about the monitoring of the impact on the environment of a humane settlement was started in the 1986-87 campaign, together with the creation of the permanent base, and it is supposed to continue during the whole national programme. Purpose of the first campaign was to determine the level of natural bottom in a virtually undisturbed environment (zero curtain).

The group taking care of chemical methodology made measurements on

water samples, collected along pre-arranged courses at increasing distances from the base up to a range of 50 km, after filtering, using an analytic technique known as Anodic Stripping Voltammetry (ASV).

The accurate analysis of the samples brought to Italy will allow the necessary controls about the reproducibility of the datum relative to each parameter and about the datum variability depending on the collecting stations.

The first data coming from the analysis through neutron activation of the atmospheric particles collected with filtrating systems, already supply a valid support for the definition

THIRD EXPEDITION

Participants: 140 people, 95 aboard the "Finnpolaris" ship, 31 on the "Polar Queen" and 14 on the "Explora".

- "Finnpolaris and Polar Queen"

Departure from Genoa on October 26th (FP) - November 4th, 1987 (PQ). Return to Lyttelton on February 29th, 1988.

- "Explora"

Leaving from Ushuaia (ARG) on January 26th, 1988

Return to Wellington (NZ) on March 8th, 1988

Purposes of the expedition:

- execution of a large programme of scientific research in the following fields: biology and medicine, oceanography and sea floors, cosmogeophysics, atmospheric physics, environmental impact, earth science, technology;

- completion of the permanent base.

Final budget: 51 billion Lire (expedition, preparatory activity and sample analysis and data processing in Italy).

FOURTH EXPEDITION

Participants: 150 people among whom 75 researchers, 2 doctors, 2 male nurses aboard the Dutch/Swedish "Barken" cargo sailing from Genoa, and aboard the "Ogs explora", an Italian ship for geophysical research, sailing from Trieste.

Departure from Genoa on October 16th, 1988.

Purposes of the expedition:

- top priority: study of the ozone belt that is dangerously growing thinner and thinner;

- further development of the LIDAR radars for the annual ozone control;

- start the study of the lacustrine fauna;

- instruments and techniques for the millimetric measurement of the annual shift of continents.

Estimate: 50 billion Lire.

of a circulation model.

As regards the measurements at sea, carried out in an area of about 10 miles around the base, they are: the sampling of bioaccumulators to be analyzed in order to establish the level of pollutants and contaminants, such as heavy metals or hydrocarbons; the collection, with submerged panels, of the biological encrusting material, which is an index of the stability level of the marine ecosystem.

TECHNOLOGY

In the plurannual programme, approved by the Interministerial Committee for the Economic Planning, some sectors have been established

where subjects of technological research can be inserted: science of materials, structuristics, robotics, telecommunications, systematics and seismic processing.

In the first three expeditions the technological developments played a less important role as a consequence of the priority given to the aspects that would permit the recognition of the status of Consultative Party to the Antarctic Treaty (permanent base and important scientific programme). Moreover the construction of the base and the performance of scientific activities caused the need to examine different approaches to technological research, because of the particular environmental situation in which the work takes place.

For example, this is the case of carbon fiber optics and of the long-autonomy O₃K cryogenic system for the OASI project, or of the automatic seismic data processing.

Other technological activities are:

- planning, development and use of servoassisted and robot instrumentation destined to a non-stop work and to be used in remote conditions;

- planning, development and operation of a system for data telecasting via satellite from autonomous monitoring units and in remote conditions;

- studies and tests aiming at the creation of a base habitable throughout the year;

- building, in Italy, of an ice mechanics laboratory.

As regards the permanent base, the necessity to guarantee its total efficiency after an almost nine-month absence of the staff, under very harsh climatic conditions (wind speed of more than 200 km/h, temperature lower than -50°C), the reliability of the systems and the stock organization under conditions of impossible external intervention, caused the need to solve technological problems concerning:

- energy supply, and above all storage at very low temperature;

- water supply;

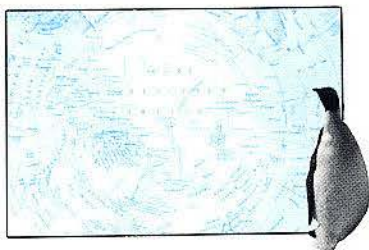
- waste disposal;

- telecommunications;

- radionavigation;

- transportations, including diagnostic methods to test the resistance of the ice.





ARMY UNITS ENGAGED IN THE MISSION

Aosta	Alpine Military School
Brunico	"Tridentina" Alpine Brigade
Padua	Command of the North-East Military Region
Rome	Military Hospital
Belluno	"Cadore" Alpine Brigade
Turin	"Taurinense" Alpine Brigade
Livorno	"Col Moschin" Paratroopers



ARMY PERSONNEL

FIRST EXPEDITION

Col. Ezio Sterpone
Lieut. Col. Mauro Spreafico
W.O. Lorenzo Boi
Cap. Enzo Giacomini

THIRD EXPEDITION

Lieut. Col. Mauro Spreafico
Cap. Paolo Serra
Cap. Fabio Catalano
C.W.O. Pietro Amadio
W.O. Edoardo Loiacono
Sgt. Maj. Luigi Pedrolini
Sgt. Maj. Ugo Vori

SECOND EXPEDITION

Lieut. Col. Mauro Spreafico
Lieut. Col. Italo Bonvicini
Maj. Simone Baschiera
W.O. Pietro Amadio
W.O. Lorenzo Boi

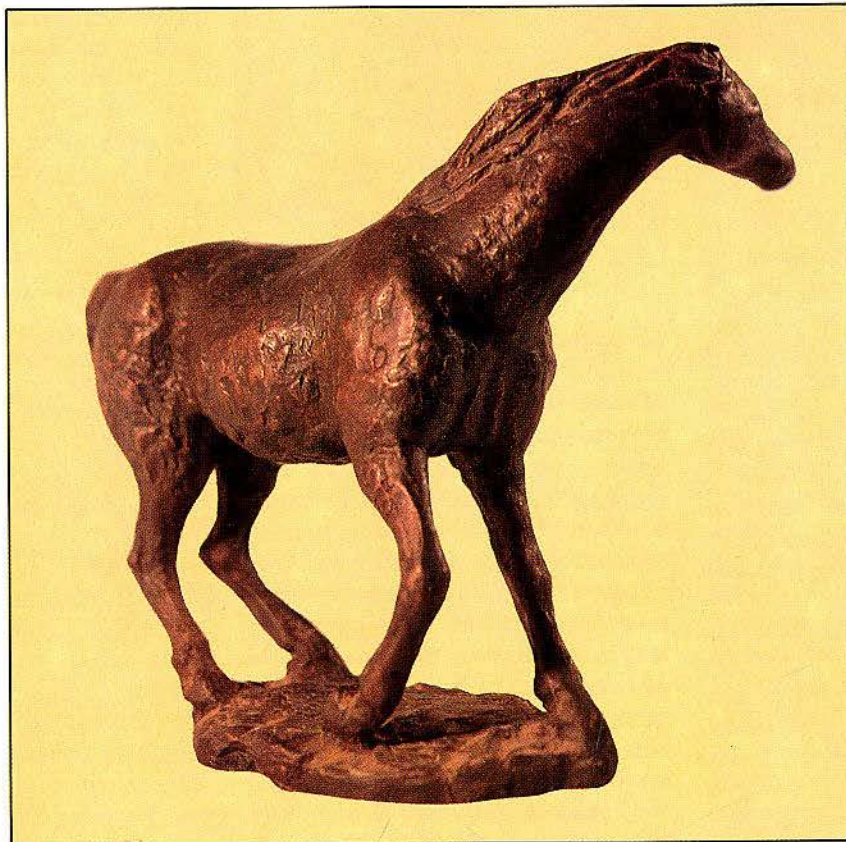
FOURTH EXPEDITION

Maj. Enzo Giacomini
Dr. Maj. Roberto Razza (MC)
Dr. Capt. Roberto Bramati (MC)
Cap. Sandro Caneppele
C.W.O. Pietro Amadio
W.O. Giacomino Sola
W.O. Edoardo Loiacono
S.F.C. Ugo Vori



*The pictures contained in the article are from
"Progetto Antartide", 1987/88 campaign.*

FOREIGN LANGUAGE STUDIES IN THE ITALIAN ARMY



The Army Foreign Language School was founded in 1963 to teach the English Language to the personnel of the Army. The growth of the requirements of an international nature has led to the study and assessment of an ever-increasing number of foreign languages (currently twenty-three). The School's teaching staff consists of professionally highly qualified native-speakers. Their efforts combined with those of the School's permanent staff of Officers and NCOs enable the School to carry out its tasks despite a certain, rather noticeable lack of infrastructures and military personnel.

The new system of assessment — adapted to NATO standard parametres - will shortly be introduced following the decision made by the Joint Committee of the General Staff Chiefs. This system involves the adoption of a new test which has already been proposed and will be more suited to the linguistic assessment of military personnel.

A new organisation of language training has also been proposed which will better correspond to the requirements of language learning. Lastly, language teaching is becoming ever more related to the employment requirements of military personnel of all ranks in an international context.

THE ITALIAN ARMY FOREIGN LANGUAGE SCHOOL

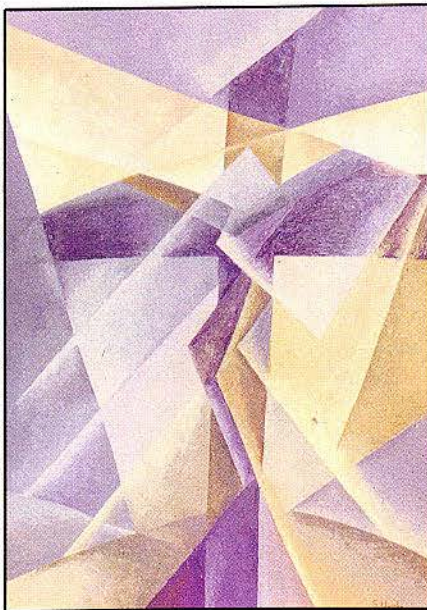
It would seem that one of the difficulties of finding the correct approach to the study of foreign languages in the Army is that it is a field which has belonged exclusively to the civilian sphere for many years. Language teachers within military organisations are civilians; experts who write books on linguistics are civilians; and the 2nd language itself is the verbal expression of a culture which is predominantly civilian. This fact may create problems of a psychological and organisational nature both for the military personnel who have to organise language courses and for those who have to attend them. The former cannot reasonably be expected to be linguistic experts even if they may possess a reasonable knowledge of a second language and the latter cannot expect to face a language course as they would face any other course on military subjects.

Last but not least, the civilian language teacher within a military organisation has to feel his way carefully amongst rank, regulations, programs and a military mentality which, on the one hand, can give him a refreshing sense of discipline and order, rarely found elsewhere, but, on the other hand, hinders his task due to an insensitivity to the problems of the exchange of mentalities and cultures involved in language teaching.

The English language will be the one mainly dealt with in this article because the demand for this language is such that it constitutes the main, but certainly not the only, teaching activity of the Italian Army Foreign Language School. However, some of the problems which will be discussed are not limited solely to the teaching of English.

THE GOALS

To state that the course objectives



of teaching English for the Army are to enable Italian officers and other ranks to work efficiently in an international or national context where the knowledge of that language constitutes a vital vehicle of communication would seem to be too obvious to be worth mentioning. However, sometimes it is easier to define objectives than it is to find ways of overcoming some of the problems involved in the attainment of them i.e. systems of assessment of linguistic knowledge, methodologies, materials available on the market, military terminology, motivation, timetabling, the intensive nature of the courses and learning effectiveness.

THE SYSTEM OF ASSESSMENT

The system of assessment of linguistic knowledge, known as the Unified Test for the Armed Forces, has some obvious advantages and a few disadvantages. Being in the form of a quiz, it is easy to administer to the hundreds of candidates who constantly apply for assessment or re-assessment of their linguistic knowledge. This test is designed in such a way that one of three levels or degrees of linguistic capacity is attributed to the candidate, according to his final score (50-64 1st

level; 65-85 2nd level; 86-100 3rd level).

An officer who desires an appointment abroad or in an international context within the nation must possess the 3rd level. Other ranks are required to obtain a second level.

However, over the years, this test has become progressively more difficult and the overriding importance of work-relatedness, which is the primary objective of English for the Army, has been lost. Presumably, the reason for the ever-increasing difficulty of the test is to ensure that the personnel, who are destined to work in International and NATO contexts, are really capable of performing well. Unfortunately, the difficulty factor now embodied in this test is not related to the objective because in order to obtain the 3rd degree, an officer is required to demonstrate linguistic knowledge of great refinement and possibly of little use in a working situation. This imbalance has been partially corrected by the introduction of an oral test for those who reach 80/100 on the Unified Test but even so an individual must have knowledge of extremely complicated literary structures which native-speakers rarely use for communication in a working environment. The punitive nature of the test could be corrected by changing some of the exercises and lowering the 80/100 barrier for admission to the oral exam. After all, questions on tests with multiple choice answers do not effectively test all the knowledge individuals possess but are simply "tasks set for them by the school system — tasks for which there are single, predetermined and 'right' answers" (*). Before leaving the subject of assessment, one further point arises. The very broad range of linguistic knowledge that the 2nd degree covers should be subdivided. It is clear that a candidate who just succeeds in obtaining a low second degree will have a considerably more limited working knowledge than one who barely misses the 3rd degree. Lastly, a great deal of the distress and embarrassment experienced by Army personnel who

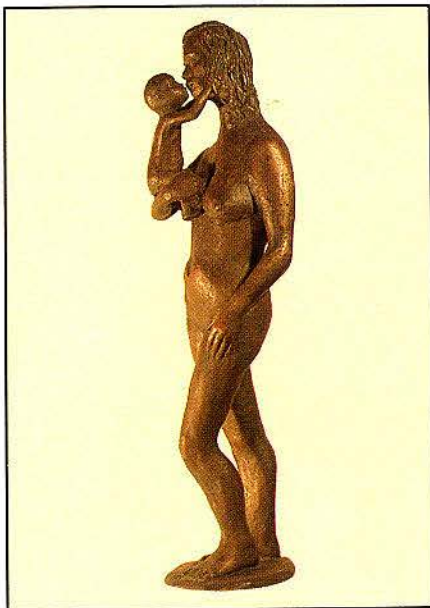
find themselves abroad for the first time could be avoided if the system of assessment, (The Unified Test for the Armed Forces) which is one of the necessary qualifications for their appointment, were more related to the practical use of the language which they will need on the job and less academic in its requirement. Naturally enough, language teaching methodologies used in Military Schools should also be adapted to this aim.

METHODOLOGIES

Teaching methodologies and materials are clearly inter-related and since the English language has become a big business concern, any course programmer is faced with a bewildering choice of materials. Publishing houses compete with each other to produce ever more books and engage experts in linguistics to produce new methodologies in order to sell them. Very often they are the same old methodologies with slight changes to make them appear new. However, the market is singularly lacking in course-books designed for full-immersion courses of 36 hours per week for courses which have from 3 to 5 months' duration, as is the case with the Italian Army Foreign Language School. Therefore, the course programmers have to fall back on the American Language Course, produced by the Defence Language Institute-English Language Branch at Lackland Air Force Base, Texas in 1966 and despite some revisions, has the defect of being rather mechanical, repetitive and, above all, uninteresting.

It is also surprising to find that quite a large amount of the material on the open market is also uninteresting but as T.A. Raznik says in his essay on Psychometric Measurement of Creativity "Creative learning requires creative teaching" and linguistic experts, who may have admirably scientific minds, may not necessarily be creative people who are capable of producing creatively stimulating material.

Since military personnel require a



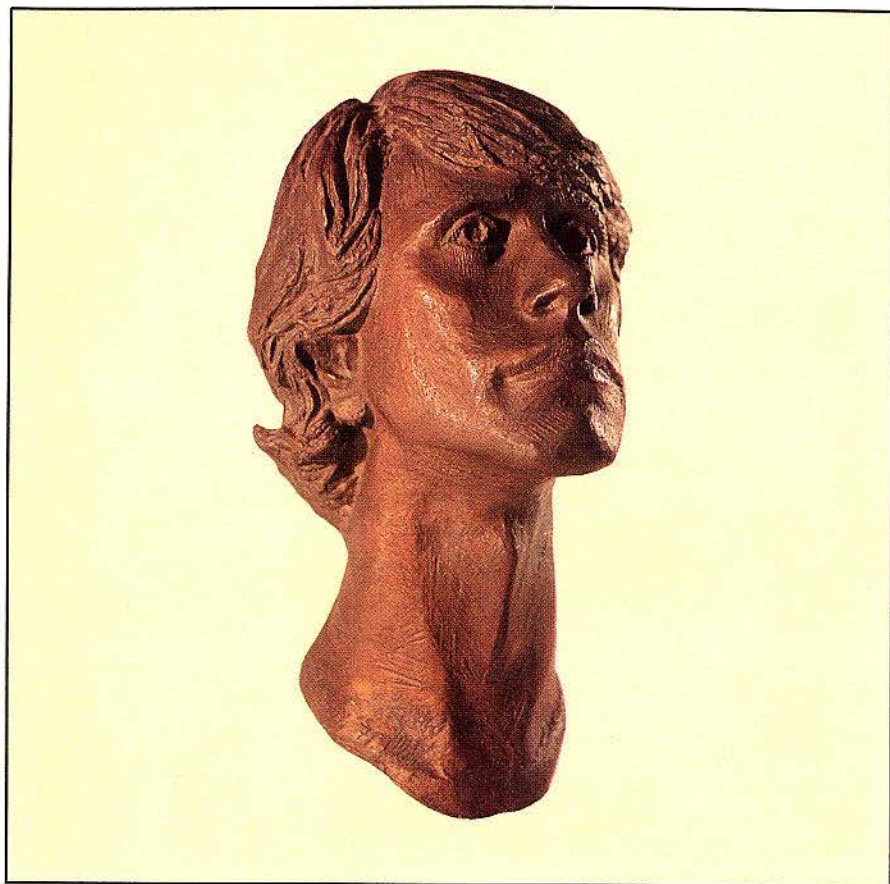
knowledge of a second language for a very specific military, technical and/or political context, it would be desirable for experts in the various military schools to create course material which would adequately fulfil the aim of work-relatedness and thereby provide additional stimulus to the learning process. As Prof. Renzo Titone of Rome University pointed out in his very interesting lecture on Psycholinguistics at the BILC Conference, held in Florence in 1985, "The context of learning is also an important factor. If, as behaviourists claim, the environment is a contributing factor to the learning process, then the teacher should always be sure to provide a stimulating learning environment". He also said in the same lecture that "Since learning must always be meaningful the teacher should make use of situational exercises which relate to the students' everyday life. In this way, the communicative experiences can be more easily stored for future retrieval".

It can be deduced, therefore, that if language learning for a specifically military context is to be stimulating, meaningful, situational and related to the students' everyday life, some effort to produce work-related material should be made and financed. It would be false

to assume that a civilian language teacher within a military language institute would be incapable of coping with a military work-related methodology. But it would necessitate a great deal of time and good will on the part of the teacher to become familiar with the concepts and doctrine behind the tactical, strategical, technical and political terminology that he is required to teach without the support of adequate military linguistic material.

MILITARY TERMINOLOGY

Military terminology is one of the most insistent directives of the Italian Army Foreign Language School. When civilian teachers are told to teach military terminology, the question becomes problematic because the directive has not specified which type of terminology should be taught. The choice is bewildering. Should the students be taught technical military terminology for signals, artillery, informatics, motorization, or terminologies for tactics, NATO, General Staff and so on? Each field has such a vast specific terminology that it would clearly be unreasonable to expect a student on a three or five month intensive course to face such a task when it is all he can do to master complex grammatical rules and structures and absorb an adequate vocabulary for communication. A certain very basic terminology could be taught but inevitably an officer or N.C.O. employed abroad will have to resign himself to a period of adjustment which can last from 3 to 6 months where he will be learning his new job and therefore the terminology involved with it. To overcome this problem it would be necessary to run specialized advanced courses of English, for the various branches and military attachés but, at present, this doesn't seem to be a feasible solution due to the present situation of the School's infrastructures, personnel and equipment. It is necessary to point out that the



Italian Army Foreign Language School Studies Office has recently compiled a dictionary of military terminology drawn from glossaries from various military institutions. Also an experiment to enliven and render the teaching of tactical terminology more meaningful has successfully been conducted. A commercial, tactical computer war-game was adapted to a classroom situation so that the students of an advanced level of English were required to discuss the evolving situation using English tactical terminology until they arrived at a decision. They then gave their orders to the computer and were able to discuss the new situation which resulted from their orders. Other experiments of this nature are being planned: the simulation of a situation in a bunker, such as UN observers might have to face, or NATO telephone calls. In the absence of adequate material and infrastructures these efforts are naturally limited, however, they will certainly contribute to the students' motivation and learning ef-

fectiveness.

THE LANGUAGE COURSE

The vast majority of students who attend courses at the Italian Army Language School are very highly motivated. If the opportunity to improve their personal culture were not enough to ensure their diligence, then the possibility of improving their professional efficiency and of opening new cultural horizons by employment abroad would surely constitute an undeniable safeguard against their wasting their time and the tax-payer's money. Therefore, motivation being no obstacle to learning effectiveness, it is necessary to examine other factors which may impede or enhance their productivity.

It has long been recognized by linguistics experts that the factor of "intensiveness" in the language teaching/learning experience is of fundamental importance for learning effectiveness and, in this respect, the Italian Army Foreign Language

School is fully in line with this criterion as most of the courses it programs are of a highly-intensive or moderately intensive nature. The period of time which is generally regarded as being optimal by experts is 6 or 9 months but the organizational requisites of the Italian Army can only concede a shorter period: 3 or 5 months. In this shorter period the objectives are:

- a second degree of the Unified Test of the Armed Forces for those who attend the intensive phase of the correspondence course;
- a high second or third degree for those who attend the Advanced Course.

Clearly, a student who attends these highly-intensive courses of rather limited duration is under quite a lot of external and self-imposed pressure to conform to these course objectives.

A language course is quite different from any other course an individual may attend in the course of his military career. It not only involves understanding and memorization, which are common to all courses, but, as Professor Renzo Titone puts it, it "is a process of assimilation which tends to incorporate a language behavioural system into the learner's personality". Needless to say, the more flexible and communicative the personality structure of the learner is, the more effective the learning process becomes. However, since language aptitude testing is not one of the conditions of admittance to the language courses, it is necessary to study the case of the less linguistically-gifted individuals who require the knowledge of a 2nd language for their work. The process of assimilation into a learner's personality of what may often seem a thoroughly alien form of expression, due to differences of culture and mentality, requires time and in these very intensive courses, a course-programmer should take into account the most efficient way of establishing the daily time-table. In courses of such limited duration, it would be desirable for the lesson hours to be concentrated into six

periods per morning, thus leaving the student free, in the afternoon, to review and assimilate all the new structures and vocabulary taught during the morning lesson-hours. Furthermore, it is necessary to consider climatic factors which may influence an individual's learning effectiveness. In the summer heat of July afternoons an individual cannot be expected to attain his full potential with the temperature around 35° centigrade at the end of a year's work. Office hours may be suitable for work of a different nature where there is a variety of activities but a School with such particular and specific characteristics should be free to establish a time-table which will be most likely to lead to the attainment of its goals.

FINAL CONSIDERATIONS

In conclusion, it can be said that amongst the many problems which the permanent staff, teachers and students have to face, at the Italian Army Foreign Language School, only a few of the most urgent ones have been dealt with in this article: the system of language assessment, methodologies and materials available on the market, military terminology, student motivation, the intensive nature of language courses, appropriate time table of daily activity and learning effectiveness. However, it is opportune to emphasize that in the world of today, in which no nation can afford to remain isolated because its social, economic, industrial and political sur-

vival depends on co-operation, language teaching and learning must necessarily be seen as a vital means towards communication in an increasingly international interdependence. This could not be more true for a modern Army.

Susan Murphy

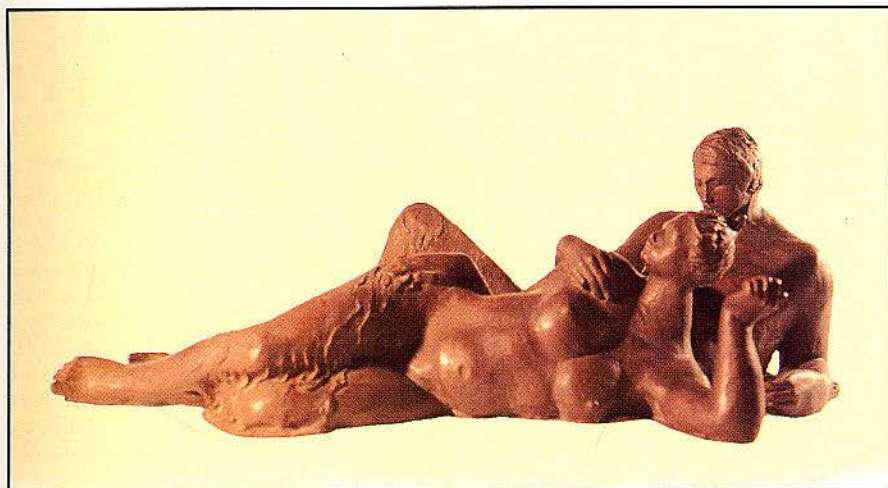
NOTE

(*) T.A. Raznik, Psychometric Measurement of Creativity. P.E. Vernon Penguin, Modern Psychology.



Susan Murphy received her diplomas from the Cambridge Institute of Education and from the Rome Academy of Fine Arts, Sculpture Course (the sculptures and paintings reproduced in this article are hers).

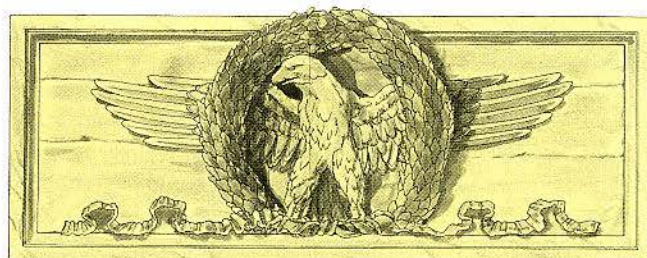
She taught at numerous schools in England and after her arrival in Italy, she has taught at Rome University "La Sapienza" as assistant and also at the Rome Association of Architects. She has also taught at the Army General Staff College and at the Carabinieri Officers' Training School. She is Deputy-Dean of the Army Foreign Language School where she has taught for seventeen years.



FOREIGN LANGUAGE STUDIES IN THE ITALIAN ARMY



THE TRAJAN COLUMN



HISTORICAL-MILITARY ASPECTS OF THE ROMAN EMPIRE AT THE END OF THE I CENTURY A.D.

The Trajan Column rises in the eponymous Forum which Trajan had built between 107 and 113 A.D.

Built to celebrate the two campaigns which the Emperor led against the Dacians (101-102 and 105-106), it presents itself as a very long roll (volumen) (1) along which the war against the Dacians unfolds itself, for a total length of 200 metres and with more than 2,500 pictures in a continuous relief. The account of the events avails itself of the schemes which were usually used for the paintings shown in the parades during the triumphal display (construction of works of engineering, speeches to the troops, battles, religious ceremonies...) though enriched by a whole series of episodes, especially relevant to the Dacian war, without repetitions or decline in tone, even in the crowded collection of facts and characters. The Column is 100 Roman feet high, equal to 29.78 m. (2) and is formed by 17 huge drums of precious Luna marble, inside which a comfortable winding staircase has been created (3). As is said in the memorial epigraph situated at the base, the size of the Column corresponds to the height of the cut made to pull down the saddle which in the old days connected the Quirinal hill to the Capitol and thus allowing the monument's construction. We also know that the golden urn containing Trajan's ashes was laid down in a cell inside the base, an event to be considered exceptional since it took place inside the pomerium (4) and it was

made possible by the fact that the Emperor had celebrated the triumph inside the walls.

From an artistic point of view, the Column can be considered one of the masterpieces of ancient art, so much so that it constitutes also a source of inspiration for many Renaissance artists. In fact, we find ourselves faced with a work of great personality, of which, among other things, we know nothing — Roman art was in fact State art — identified by many with Apollodoro from Damascus. At the beginning, at the top of the Column there was Trajan's statue which was lost during the Middle Ages and was substituted by will of Sixtus V in 1587, with that of S. Peter, made by Giacomo della Porta.

From a thematic point of view, this monument is a never-ending source of information on the most diversified topics. Since it relates war events, it is however clear that the military aspect is prevailing and very interesting under a historical and documentary profile. In this article we have wanted to underline certain particular scenes of the Column which more than others help to understand the military organization in Rome at the time of its maximum expansionism. In the presentation we have used the plates found in the work by E. Pistolesi, dated 1846, since, thanks to the excellence of the engravings, it is one of the most beautiful graphic restorations of the reliefs.

Opening page

Relief with eagle. Originally in the Trajan Forum, it was placed, in the Middle Ages, in the church of the SS Apostoli. The eagle, symbol of the Roman power, is flying, wings spread out, and clutches a crown in its talons. Trajan age.

Right

The Trajan forum and column in their original setting. Particular of the relief map representing Rome in the age of Constantine. (Rome, Museo della Civiltà Romana)

PLATE I BOUNDARY SYSTEM

In this plate there is an illustration of the Roman defensive system along the Danube. The river in fact represented the natural boundary which divided the spheres of influence between the Dacian and the Roman powers. The right bank had been long since fortified and represented a part of the more complex boundary system, identified as the Danubian limes.

Generally speaking, the *limes* must be interpreted as a complex road system rather than as a real static barrage. It was in fact a net of terrestrial or river communication routes, at the border or beyond, logically supervised and defended by a whole series of fortified works. The above mentioned concept of *limes* is also close to the Trajan era, since up to that time the Roman forces had always shown the tendency to solve wars with open-field battles, i.e. going towards the enemy, rather than taking on a defensive attitude, taking refuge within the walls of the great cities or taking cover in the boundary defensive structures. Later on the *limes* became, on the contrary, an ever more static defence system against the barbarians pressing at the borders. Moreover, the importance of this concept has been handed down to us by the Theodosian Code (5) where we find a measure taken by Constantine, dated 323, according to which the soldier who abandoned his place in the *limes* was sent to the stake.

The fortifications which are here represented were certainly not continuous or connected to each other if not by some military roads, and they had the role of



sighting and communicating any movement beyond the boundary, as is effectively expressed by the representation of the torches placed on each turret. The final action against probable invaders was delegated to the large legionary units positioned in the *castra* well within friendly territory: thus, the infantrymen here represented belong to the auxiliary units.

The Danubian *limes* was also strengthened by a river fleet (*classic moesica*) which had its own series of signalling and warning towers.

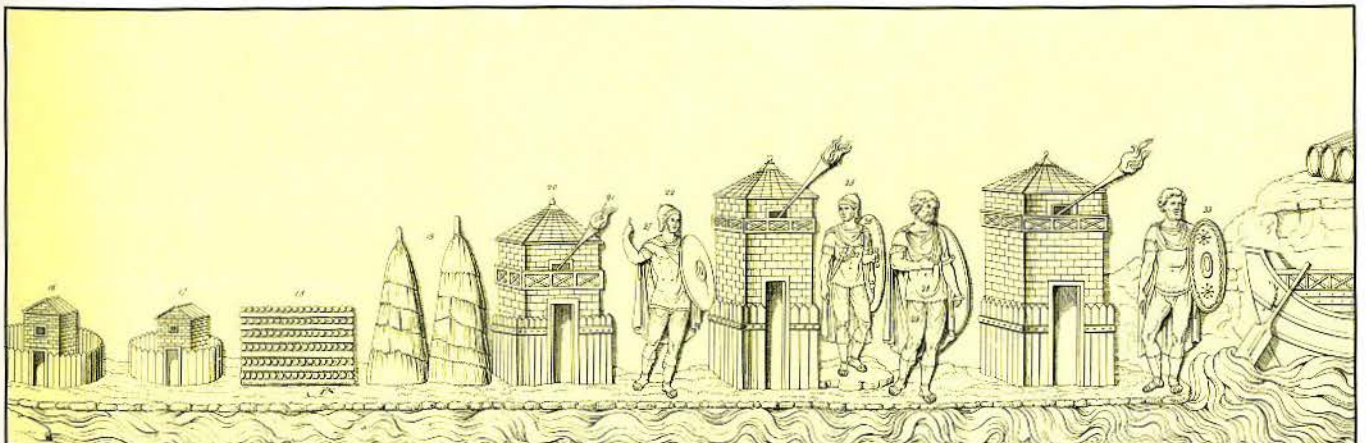
PLATE VII SETTING UP AN ENCAMPMENT

In it we find the various stages of the set-

ting up of a stable encampment (*castrum stativum*). The construction of an encampment represented a very important part in Roman military engineering. Infact, an army moving on hostile territory, built an encampment at the end of each day's march, and its typology varied above all according to the duration of the settlement.

The first and essential thing to be done, was of course spotting the right place in which to settle. This task was carried out by specialized staff, land-surveyors and *mensores*, something like today's non-commissioned officers, who also marked out the lines on which the camp was supposed to rise.

Even if often in a conflicting way, the sources (6) have handed down to us a whole series of very precise rules which were to



TAV. I



be followed. The camp had to be limited by a soil relief (*agger*) behind which the soldiers could keep watch and fight. In the plate we are examining, the *agger* made of soil is substituted by a masonry structure: it is the clear demonstration of an encampment destined to be occupied for a long period of time. The defensive of the *agger*, completed by one or more ditches, is here represented by a watercourse, underlined by the presence of two railings of a bridge.

The construction of the encampment was assigned to the legionaries themselves, supervised in their work by the centurions (7), while the cavalry units and the *immunes* remained to keep watch in arms. The latter, represented in the plate by the three legionaries in arms in front of the *castrum*, were soldiers exempted from the ordinary service to carry out special and particular tasks.

The importance taken on by the encampments in the Roman military organization is underlined by the fact that, even after long sieges, the enemies very rarely managed to conquer the *castra legionaria*. The few exceptions are regularly related by the historical sources, precisely for their extraordinariness. The Legion that lost the *castrum* risked to be even broken up. It is known how, during the period of anarchy after Nero's death, up to four encampments of the Rhine army fell into the hands of the Civil Gallic-German rebels: *Novaesium* (Neuss), *Castra Vetera* (Xanten), *Mogontiacum* (Mainz) and *Colonia Agrippina* (Cologne). The event

was considered so serious that, when reorganizing the army, Vespasian did not set up again the units whose camps had fallen.

PLATE XI ARMAMENT AND LEGIONARY BANNERS

This picture has been chosen since it is a sound representation of a unit of perfectly equipped legionaries and some banner carriers.

The legionary of the Trajan era wore a kneelong cloth-tunic and on top a short leather jacket which protected him up to the arm. The actual armour was formed by metal pieces, joined together by studs and clasps, shielding chest and shoulders. The stomach instead was protected by a series of leather strips, decorated at the ends with bronze pieces. The helmet was in metal, without a crest, with a vertical neck-guard and a mobile cheek-protector, while the semi-cylindrical, wooden shield had a central boss and metal decorations.

The rest of the armament, which is not represented here, was formed by a short sword slung over one shoulder, attached to the baldric on the right, and by a javelin.

The banner carrier wore a wolf's hide as emblem of his duty. The plate represents three standard-bearers, whose task was that of guarding the legionary eagle, i.e. the Legion's most important emblem and two signifiers who instead had the task of protecting the maniple's banner. On the ban-

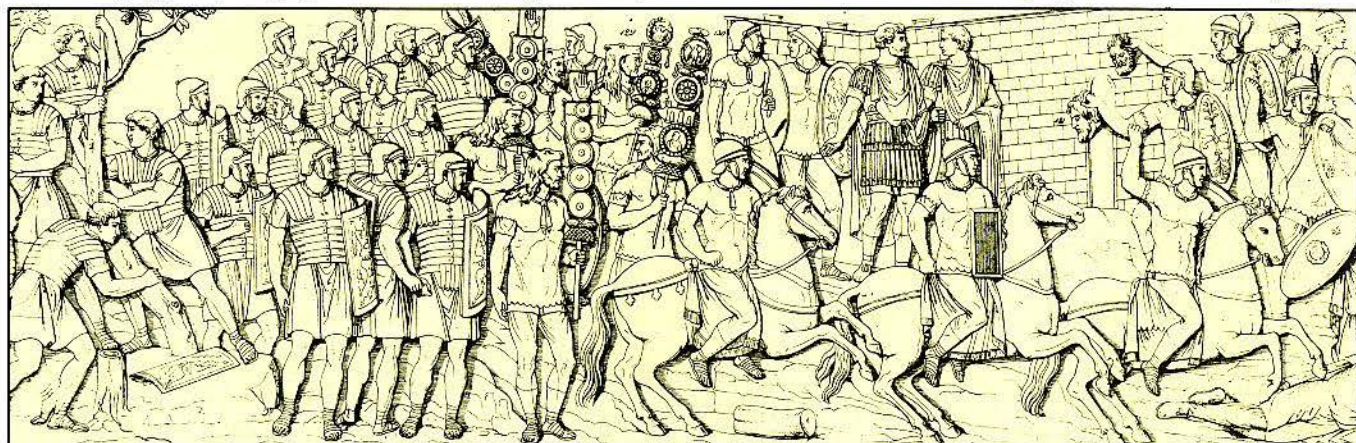
ner's pole, as one can see, apart from the eagle and the open hand, symbol of the maniple, there are also the decorations which the unit conferred upon itself. For the maniples there are above all *phalerae* (medallions), while for the legionary banners there are *coronae murales*, *vallares* (8) and other *phalerae* with the effigy of emperors or patron deities.

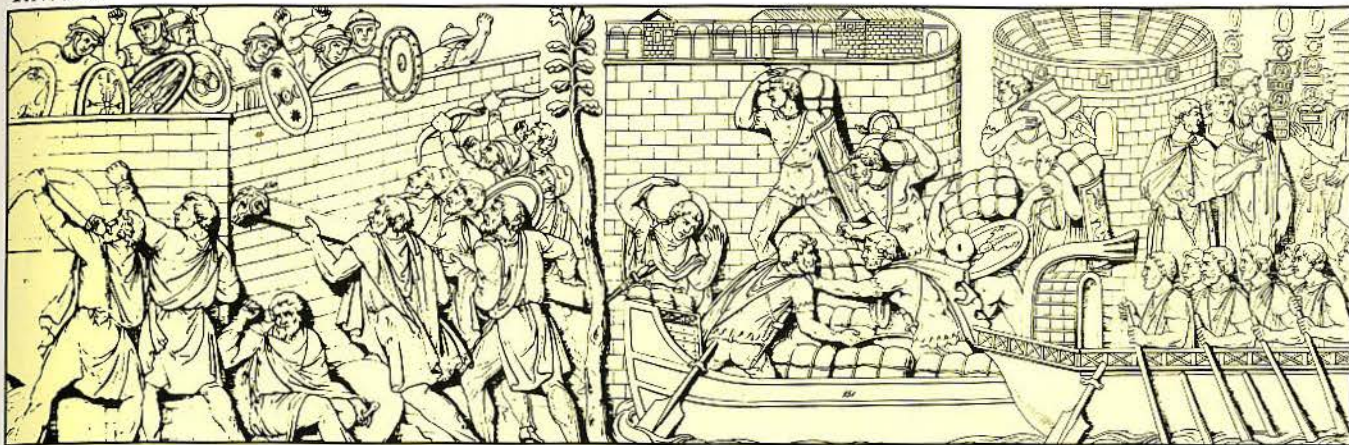
The banners (*signa*), inside the encampment, were kept in a *sacrarium*, indicating the nearly religious relationship which the legionary had with them. The loss of the banners in war, especially of the legionary eagle (*numen legionis*) was considered particularly defamatory.

PLATE XVI WAR INSTRUMENTS: BATTERING-RAMS

In the plate one can see the use of a war instrument which has always been used by the ancient armies, i.e. the battering-ram. In this case it is handled by a group of Dacians attacking a Roman encampment. The model here shown is the most primitive example of *aries* i.e. formed of a simple but strong battering-ram held by some gunners, with which one tried to pull down the enemy fortified works, with the repeated and violent action of the weapon's impact.

The Roman armies' siege parks were of course equipped with technically more





sophisticated battering-rams such as the *aries pensilis* which hung from a wooden scaffolding; the *aries subrolatus*, similar to the previous one but mounted on wheels, and the *testudo arietata* in which the gunners were protected by a mobile canopy covered with fireproof material. These devices could also be placed in the *turres ambulatoriae* or mobile towers, i.e. the war machines destined to approach and attack the enemy fortifications.

The instrument which could be used to fight the action of the battering-rams, was the *lupus*, a kind of big metal grapple used to lift the beating part of the battering-ram so as to block its action.

PLATE XIX THE EMPLOYMENT OF SPECIAL CAVALRY UNITS

The central part of this drawing is characterized by the representation of a heavy cavalry unit. No doubt they are Roxolan Sarmatians, allies of the Dacians, well-known for their capacity to form a kind of army on horseback precisely because they were highly protected.

The employment of the fully-armoured cavalry is not European but Iranian, and historical data tells us that the Parthians were the ones who greatly employed this particular type of unit, armed with bow and lance.

Most probably the mounted soldiers here represented are not running away, but are fighting using a technique which is also typically Eastern: galloping the horse, the warrior knooks and shoots the arrow backwards against the chaser. Precisely because it had to submit to this technique, in 53 B.C. in Mesopotamia, Rome suffered one of the most disastrous setbacks of its Republican life. In fact, on that occasion, Crassus' army was practically destroyed by the Parthian army which fought in the above mentioned way.

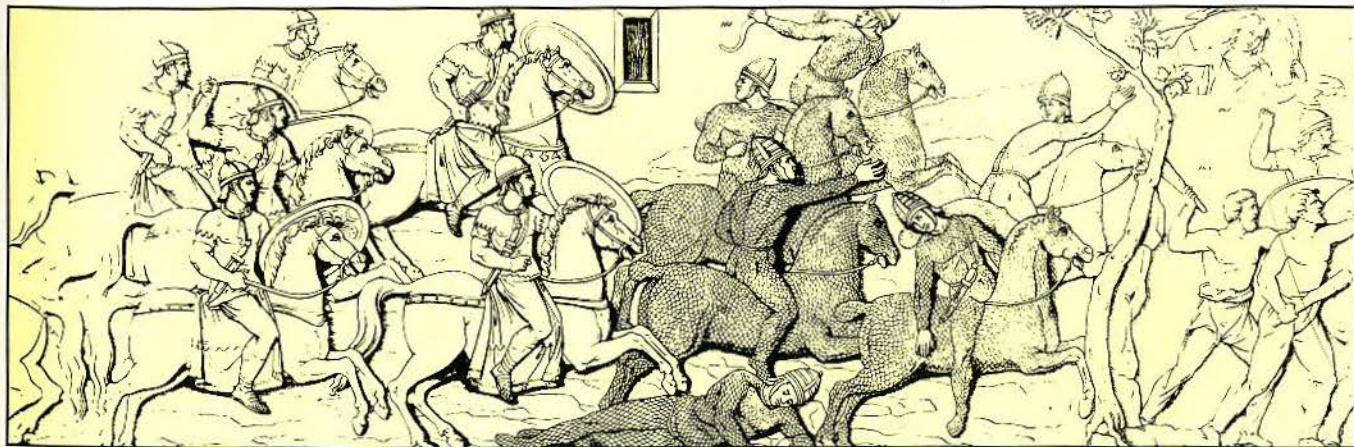
The Romans formed very few fully-armoured auxiliary cavalry units. We know that in 159 A.D. in Dacia, there was the *Ala I Gallorum et Pannoniurum cataphractaria*, a unit which was probably broken up after a short time.

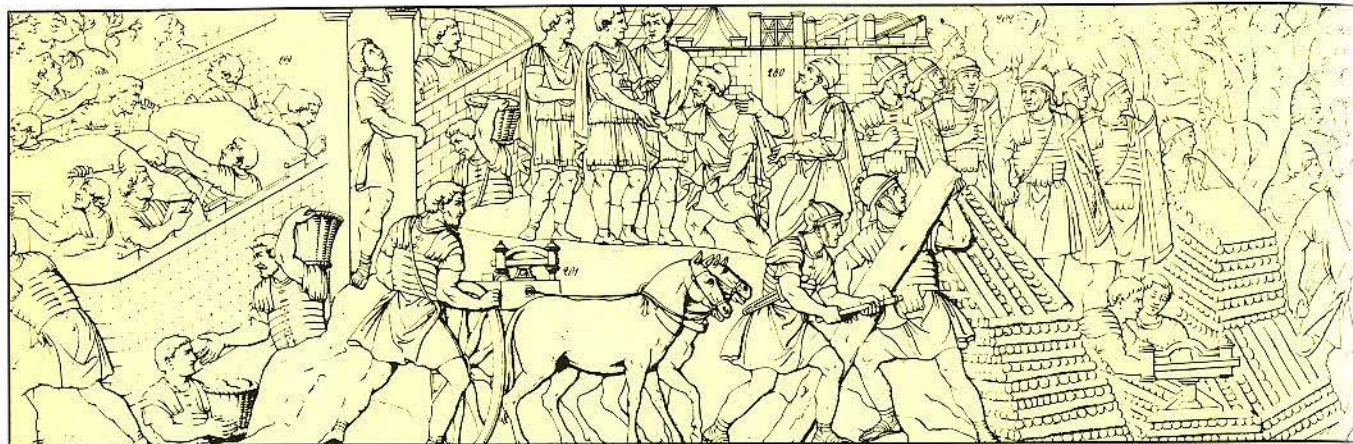
PLATE XXXIII WAR INSTRUMENTS: BALLISTA

This relief is characterized by the representation of some war machines apt for bullet launching. The Roman army always knew how to use best war instruments capable of hitting the enemy with more strength and at a distance greater than what the soldier could do just with his physical strength. The machinery used was not created by the Romans, but mainly taken from the Greeks. The sources which talk to us about it (9), have identified it with different, often con-

trasting terms, also according to the historical period which is examined. In any case, *scorpiones*, *catapultae* and *ballistae*, employed the same propulsive system, i.e. the twisting force of two hanks of elastic but at the same time resistant material (animal nerves, tendons and horsehair). They practically acted as great bows in which the propulsive force was substituted by the twisting force instead of being given the elasticity of the bow itself. It is clear that such instruments have evolved in time. The bullets which they could shoot were formed by darts or by actual javelins which were up to m 1.70 long, and by stones, of various weights, from the smallest of little more than 500 grams to huge ones of 50 and 75 Kg. Along short and medium distances, the bullet had to neutralize the enemy even if its maximum range was of course much longer.

The examples here shown (bottom right inside a fortified weapon-pit, centre top on the walls of an encampment and finally centre bottom on a chariot) are no doubt *ballistae*, but of a rather particular kind. It is believed that the progress in technical know-how allowed the Romans in the Trajan period to use a special kind of ballista, identified with the name of *crossbow*. It practically integrated or substituted the twisting force of the hanks with the elasticity of an iron bow, schematically represented by the bow which is visible in the top part of the weapon's frame. Another extremely interesting detail, despite the limits imposed by the relief's conventional representation,





is the portrayal of the steps which held the propulsion trolley in the centre of the machines' frame. In the two top models, it presents itself at its highest elevation, while in the one bottom right it is ready for low-angle fire and thanks to an overturned perspective view, one can see the groove within which the bullet passed.

Instead the model mounted on a chariot pulled by a pair of mules was known as ballista chariot.

PLATE XXXIV WEAPONS AND DACIAN EQUIPMENT

Various interesting news can be obtained by observing this drawing. First of all one can notice that the Dacians had no passive protection except an oval shield. They did not even have a helmet, but they wore the national headgear called *pileus*, which differentiated the members of an aristocratic class from the rest of the population (*comati*). The national weapon was the deadly *falx*, a kind of curved sabre, the model and use of which disappeared with the progressive Romanization of Dacia. Centre top one can see a *draco*, the typical banner of the Dacian soldiers. It was formed by an elongated, serpentiform envelope made of hides, held by a long pole. Its structure allowed the passage of air so that when the army attacked the wind, by blowing up the

vexillum, provoked the spreading of hissing, sharp sounds thus frightening the enemy.

Centre-top, one can observe a position ballista handled by two Dacians. It is possible to consider it as spoils of war or as a Dacian creation. To support the latter possibility, one should be reminded that, according to the clauses of the peace treaty signed by Domitian, specialized expert personnel, such as engineers, carpenters and military instructors, had been sent to the court of king Decebalus, and from it the Dacians could have learned the technical notions to build the weapon.

PLATE XXXVI ROMAN AUXILIARY TROOPS

Talking of the Roman army one usually refers to the Legions. One must remember though, that there were many auxiliary corps serving the Roman banners, so much so that their effects turned out to be numerically equal to the legionary ones. These soldiers were recruited among the inhabitants of the provinces: Roman citizens were only officers (10). They served in cavalry and infantry formations, *alae* and *cohortes*, that could include 500 and 1000 units (*quingenariae* or *miliariae*). The latter could also be supported by a cavalry contingent (*equitatae*).

Usually the auxiliaries received the Roman citizenship when they were discharged, i.e.

after 25 years of service. They were divided under various names according to the region of origin (*cohors III batavorum miliaria equitata*, *Rhaetia* 107 A.D.), or the emperor under whom they had been formed (*cohors I Nerviorum*, *Britannia* 105 A.D.), or moreover according to a particular armament (*ala III augusta Thracum sagittariorum*) Northern Pannonia 133-268 A.D.

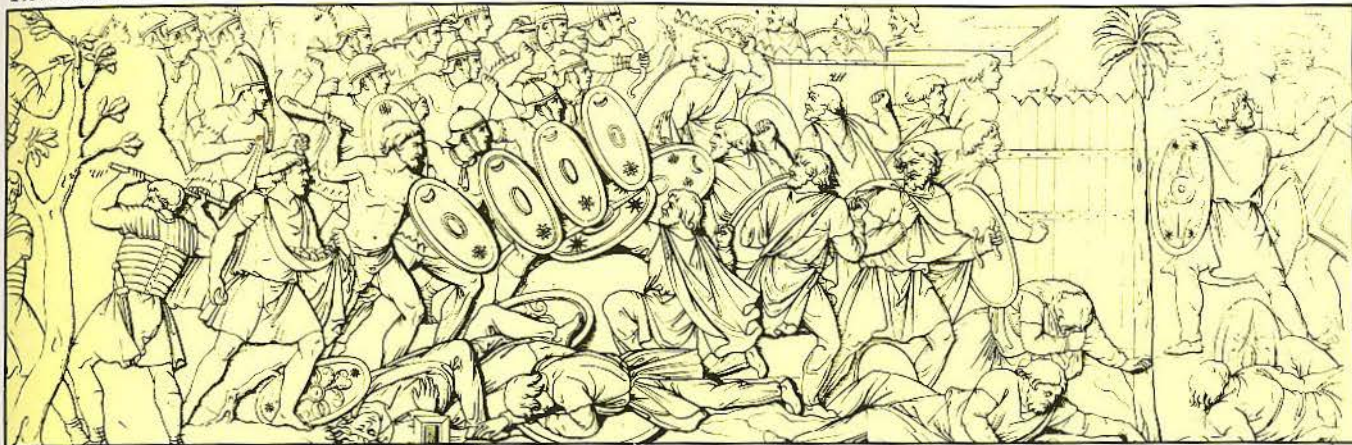
This plate shows a group of auxiliaries in formation for attack. At the top one can see a group of archers who, because of the bow and helmet's shape, are certainly from the East. Practically outside the formation there are two soldiers with uncommon arms: one, who seems of the Germanic kind is practically naked and fights with a bludgeon and a shield; the other is simply armed with large stones which he keeps in the *sagum*.

PLATE XXXVII WAR INSTRUMENTS: TESTUDO

The scene, which is dominated by the figure of the Emperor helped by some members of his General Staff (*consilium*), is particularly interesting since on the left there is the portrayal of a *testudo*. It was a formation to attack a fortified work and it was a representation of the instinctive movement made by the soldier to protect himself from the blunt instruments thrown from above.

The *testudo* here represented is formed by

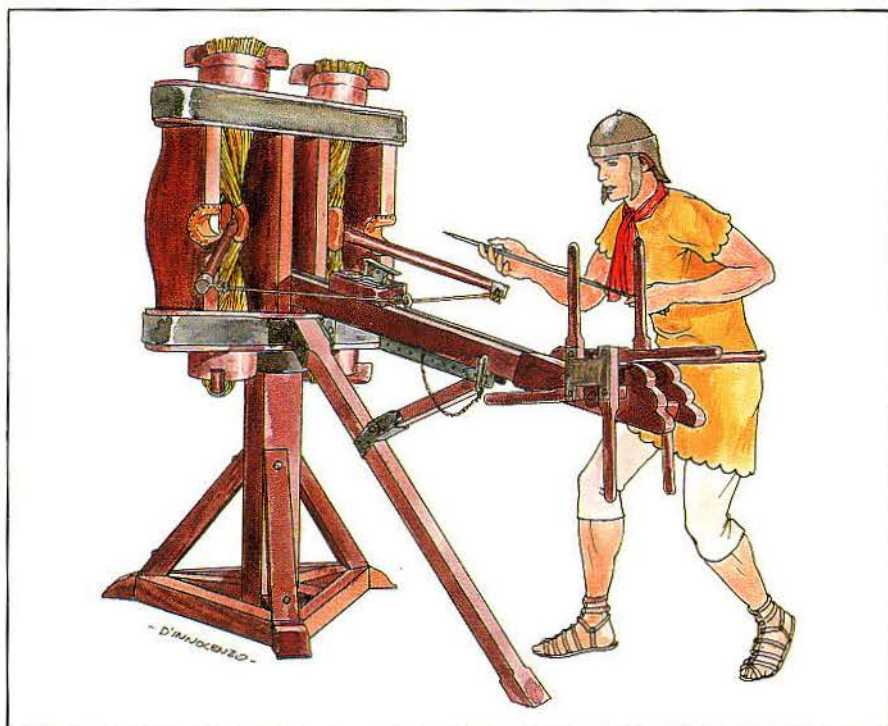




a group of soldiers set out in various lines. The unit approaches the enemy protecting the top part of the formation with most of the shields while the rest are used to protect the sides. It is clear how the above mentioned method of attack could be of use only if employed against partly fortified targets and its action had to be backed up by the use of launching war machines and integrated by those which help the approach and attack. Of the latter, it is worth mentioning the *vinea*, a fixed wooden shelter for about 20 men; the *porticus*, with the same structure, but mobile and formed by more *vineae* together; the *musculus*, used by the pioneer units to fill with fascines and stones the moats in front of walls and aggers; and finally the *pluteus*, a small protection for a few soldiers with the task of observing and disturbing the enemy with some bullet launching. They were all covered with fireproof material capable of absorbing shocks.

PLATE LXXIII THE SUICIDE OF DECEBALUS, KING OF THE DACIANS

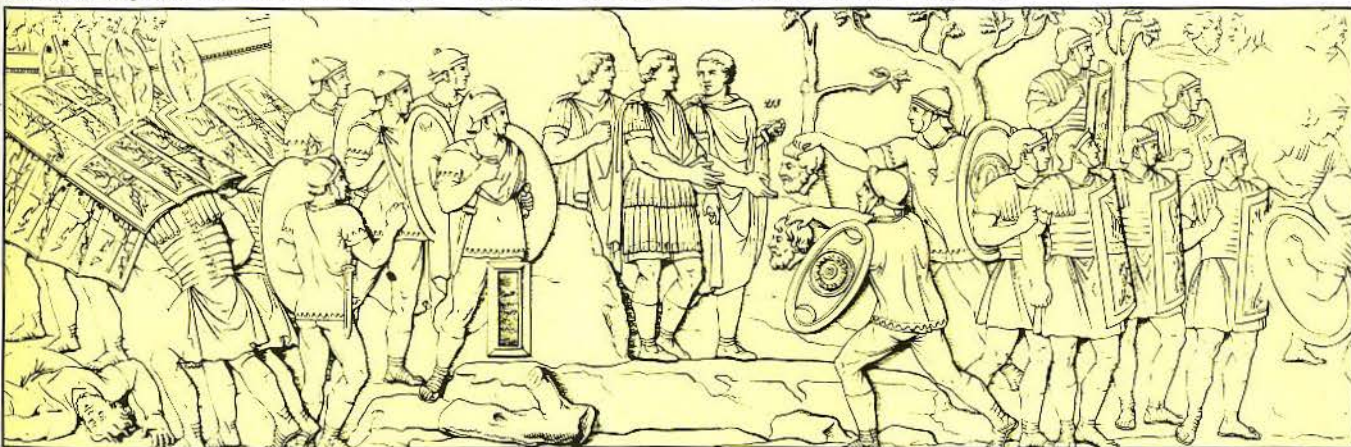
This scene is dominated by the impressive and tragic figure of the barbarian king who, having been reached by the Roman cavalry, decides to commit suicide instead of being taken prisoner by the enemies. One can see some soldiers running towards Decebalus, trying to stop him from committing suicide:

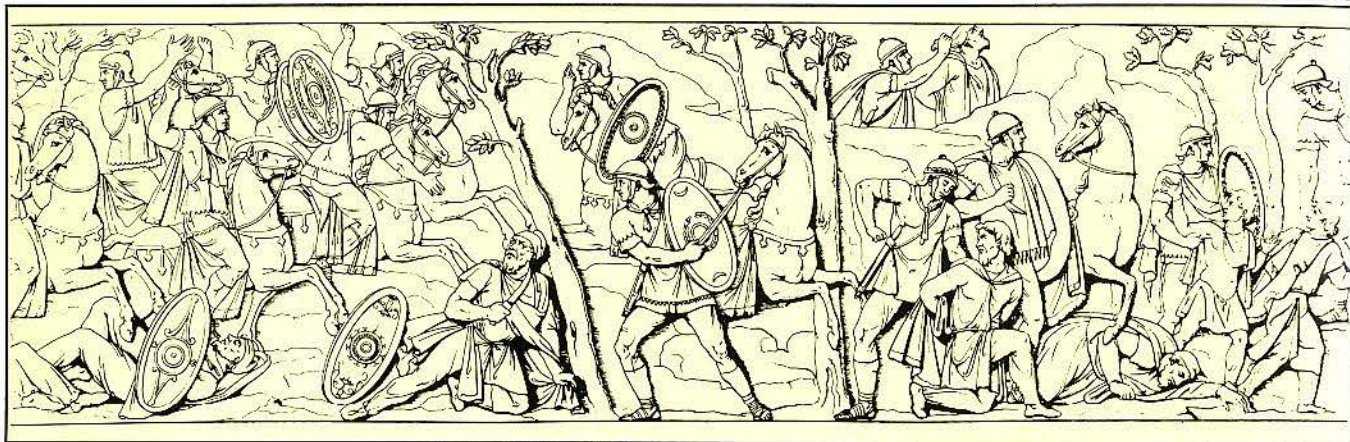


they would have certainly gained greater rewards by capturing the king rather than by having him dead. In fact, Decebalus would have been the most longed-for prey to exhibit in chains in Rome during the triumphal procession. No doubt his end

Ballista with man

would have been less epic, probably ending in the humiliation of a capital execution in captivity.





DESCRIPTION OF SOME GREAT LEGIONARY UNITS WHICH TOOK PART IN TRAJAN'S DACIAN WARS

Trajan's Dacian Wars were military operations carried out with a relevant deployment

of armed men. All together the Legions (11) which took part in the two campaigns, or at least in part of the operations, were probably 10-11, to which one must add a strong presence of *auxilia* units: so about one third of the legionary effectives of the whole army took part in the conflict.

The analysis of the literary and epigraphic sources, of historical reliefs and of the monuments shattered in the Empire's ancient

provinces, have allowed us to put together a large amount of data useful for the practically certain identification of the great legionary units which took part in the Dacian wars. We have here reconstructed the history of some of them, extended beyond Trajan's period.

The choice was not dictated by a particular aim if not that of presenting some of the Legions which "made" history two thousand years ago.

AN OUTLINE OF THE HISTORY OF THE PEOPLE OF DACIA AND THEIR RELATIONSHIPS WITH THE ROMAN POWER

The political and economic development of a strong Dacian-Getic state, whose nucleus was situated in the Carpathians of the south, began in the second half of the II century A.D. The material and commercial base of the phenomenon was to be found in the development of activities connected with the mining and processing of iron. These activities greatly developed (through the use of new, easier to use and cheaper tools) building and agricultural activities which resulted in an increase of the population. The people of this political entity, of Thracian origin, who had already settled in the region in the VI-IV century B.C., had given themselves a political organization which, though still of a tribal kind, was essentially monarchic. The importance of the king changed according to the characteristics and the strength of his personality: the high priest, who sometimes balanced and integrated the power of the king, and the tribal aristocracy (Tarabostes and Pileates) were also very important.

The establishment of a strong Dacian state, however, was greatly encouraged by the threat represented by the neighbouring people, the Celts and the Roman influence. Literature and archaeological findings allow us to consider Burebista, king from 82 to about 44, the first great Dacian king. Besides putting together and strengthening the state from within, he carried out a dynamic and expansionist foreign policy.

Around the year '60, Burebista began operations against the Scordisci and the Bastarnae (of Germanic origin) and conquered the Celt populations of the Boi and the Taurisci, thus incorporating these territories in the Dacian state and moving the new boundaries on the Danube and the Moravia. His power spread to the Pontus where he attacked and occupied several cities of Greek origin, reaching the foot of the Balkans with his army.

Rome had obviously already been in contact with Dacian expansionism: when Burebista, for example, conquered the Scordisci, he reached the provinces of Macedonia and Illyria. Caesar, who at the time (second half of the I century B.C.) represented the power of Rome, had to think of operations against the Da-

cians: this is confirmed both by Suetonius and Plutarch. Before engaging in the fight, however, Caesar and Burebista, more or less at the same time, fell victims to an attack.

It must be mentioned, however, that the actual conquest of the regions inhabited by Dacian populations was not part of the political programmes of the last republic nor of the principality: the engagement between the two cultures was limited to Dacian raids and partial operations by the Romans which cannot be considered true and proper military campaigns.

The years 85-86 A.D. saw the beginning of a raid deterioration of the relations between the two powers. The Dacians entered the province of Moesia and repeatedly defeated the Roman forces and the Roman governor of the Appian Sabine province was killed in action. Their actions were restrained only by some units located in the legionary "castra" of Novae, the Bulgarian Svistov, Oescus and Viminacium, in the neighbourhood of Belgrade. The Legions involved in these operations were the I Italic, the V Macedonian, the VII Claudia and the V Alaudae. Emperor Domitian and his army managed to drive back the invaders. In the year 86 or 87, a strong Roman contingent, under Cornelius Fuscus, prefect of the praetorium, made war on the enemy territory. In Dacia, the power was then taken up by a king who succeeded in "being" history, not only for his people, but for the whole region, for over thirty years: Decebalus. Fuscus made the mistake of penetrating in the Transylvania mountain chain where he was attacked and his army destroyed in a series of battles. The V Alaudae legion was decimated and probably lost the eagle. This was considered such a serious matter that according to the custom of the Roman army, the unit would not be re-established at the end of the conflict. The following year, however, somewhere between Transylvania and Banate, the Dacians were defeated on the open field.

Military problems arose on the boundary of the neighbouring Pannonian province over which hovered Quadii, Marcomanni and Sarmati Jazigis and this caused Domitian to slacken the pressure on the Dacians and stipulate a peace which was considered no more than a dishonourable compromise.

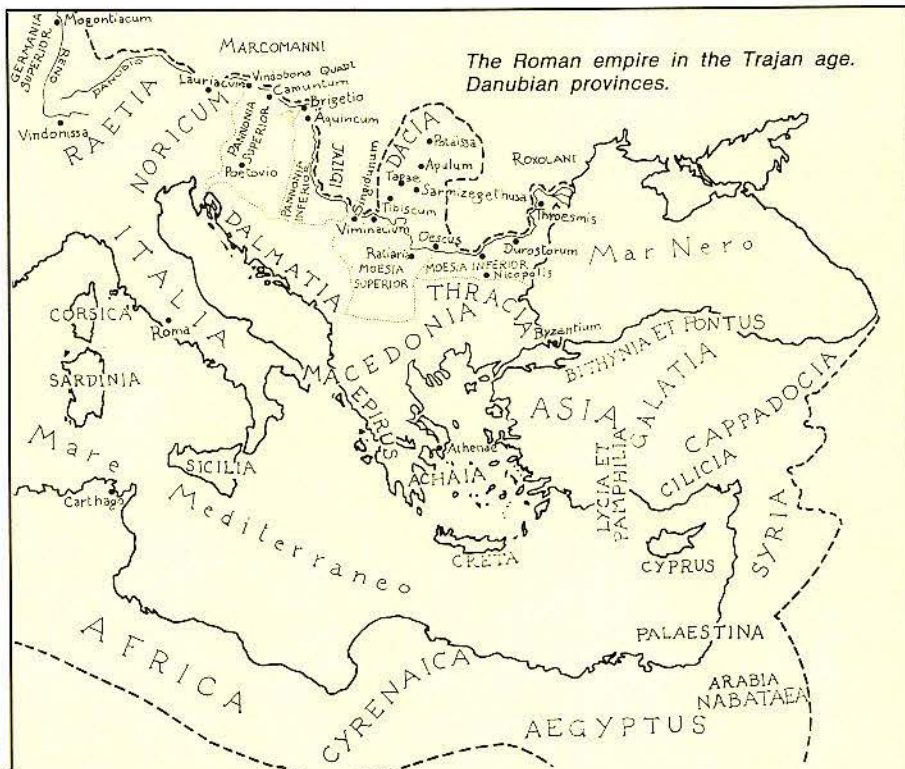
Theoretically, Decebalus could have become a kind of client king, but some articles which favoured the Dacians such as the one regarding skilled staff (engineers, military instructors, etc.), permitted them to prepare for the inevitable conflict. In the

LEGIO I ITALICA

It was created by Nero in 67 A.D. with Italic elements. In the beginning it was based in Lugdunum (Lyon), but when its founder died, and after the convulsive rapid succession which brought Vespasian to the throne, it was moved to Moesia with the headquarters in Novae (Svistov in Bulgaria). It fought against the Dacians, first in the wake of Domitian and then during Trajan's campaigns; it also fought, at least with vexillationes (12) in the subsequent operations in the East against the Parthians. During the reign of Marcus Aurelius (161-180) it was employed in keeping the Quadi and Marcomanni at the Western borders. It is also known that it took part in Septimius Severus' glorious war, against the Parthians. In the late Imperial age, the I Italica formed two comitatensi Legions (13), one with Diocletian, the other with Constantine. A formation of frontier troops (14) derived from the rest of the Legion, still situated in Novae.

LEGIO I MINERVIA

Domitian (81-96 A.D.) formed it during



historic period which followed, the Romans concentrated in the two provinces of Moesia, superior and inferior, at least another two legions, the IV Flavia (with the castrum at Singidunum, Belgrade) and the II Adiutrix, besides several units of "auxilia" and they also strengthened the Danubian "limes" and opened new routes of communication.

The advent of Trajan completely changed the Roman policy. The reasons which caused the emperor, who had been a professional military, to intervene, may be identified with the intention of making the frontiers with Pannonia and Moesia secure and eliminating from the politico-military scene those people who had become, along the middle and low Danubian boundary, a point of reference for all those who fought the imperialism of Rome.

The first stage of the Roman offensive started in the Spring of the year 101. Besides the Legions located in Moesia, the I Minervia and the XIII Gemina withdrawn from the Germanic boundary and perhaps the XXX Ulpia and the newly established II Trajan also engaged in the fight. The base from which the army moved, which was also the basis of the logistic system, was Viminacium from where one could reach Tibiscum (the present Karansches, in the Themes valley), Tapae and the Iron Gates. Once the Romans passed the Danube, they obtained a first victory at Tapae and then occupied the modern Banate (now politically divided between Rumania and Yugoslavia).

In the winter between the year 101 and 102 the Dacians, joined by parties of Sarmatians and Germanics, attacked Moesia, but were defeated by Nicopolis. In the year 102, at the beginning of the good weather, the Romans advanced to the Carpathians. The army was divided: Trajan with his legionary infantry methodically attacked and conquered the fortified mountain chain while the plains were watched by two mobile columns in which cavalry prevailed.

Not wanting the capital Sarmizegethusa to suffer a siege, Decebalus accepted the peace. The terms, for the Dacians, may be summed as follows: delivery of the war machines, destruction of walls and strongholds, the handing over of Roman deserters and of certain territories (corresponding more or less to the southern Moldavia, Walachia and the Banate).

Peace lasted till the year 105 when Decebalus, probably due

to pressure within his kingdom (revenge, intolerance for the humiliation suffered, etc.) started hostilities again, occupied the territories he had given up and attacked the Roman garrisons. Trajan, immediately returned to the region and dedicated the whole of the year 105 to restrain the enemy advance and free the "castrum" which still resisted. In the year 106, the army was divided into several columns and the emperor returned to Dacia; slowly but surely the whole area was occupied and Sarmizegethusa was first besieged and conquered and then spoiled and burnt down.

Decebalus managed to escape and take refuge in the mountains, where he tried to organize some kind of resistance; however, when he saw himself surrounded by a unit of the Roman cavalry, he preferred to kill himself rather than be taken prisoner. The last hotbeds of resistance died down in the summer of 106 and the Dacian state ceased to exist while the region was organized as a Roman province.

The population never recovered from the defeat and had to suffer the superiority of the Roman culture. It is historically proved that the Dacians who survived, living almost exclusively in the country, preserved their customs for some time (for example the cremation rites) and some of them found refuge in the areas which were not subject to the Roman dominion (Trajan had not occupied Chrysanian and the Maramures and Hadrian had evacuated Walachia and the southern Moldavia).

Several Dacians serviced in the "auxilia" units (e.g. Cohors II Aurelia Dacorum and Cohors II Augusta Dacorum Pia Fidelis Miliaria Equitata), located in the most remote corners of the empire (Britain, Cappadocia, etc.). They were obviously part of those Dacians who had already decided to before the defeat; however, we cannot say whether the units had been strengthened by recruits of the same stock. Romanization spread quickly and in a capillary way with the initial settlement of people coming from Syria and Asia Minor, and the help of a strong army which had its strong points in the two Legions located permanently in Potaissa and Apulum.

This process of cultural integration, which gave birth to a population amongst the most Romanized of the whole empire, was virtually completed when Aurelian, almost two centuries after the occupation, in 271, decided to abandon the province.



I-II century A.D. eagle bearer.

his reign employing it immediately in the operations in Germany against the Catti: its camp was set up in **Bonna** (Bonn), in the province of Southern Germany. With the approaching of the war against the Dacians it moved to the Danubian border: from 101 to 106 it was in the suite of Trajan in Dacia. At the end of the hostilities it returned to the Rhine border, again posted in Bonn. The Legion was subsequently employed in many military events: between 138 and 145 it fought in Mauretania, to protect its boundaries from the continuous revolts; it took part in all Marcus Aurelius' war operations; having supported Septimius Severus, one of its units was permanently posted to **Lugdunum** (Lyon) in 193; from 231 it fought to control the pressure of a confederation of Frankish populations at the Western borders; it initially supported Gallienus (260-268), but subsequently it backed up the attempt of usurpation by Posthumus and finally during Diocletian's reign it lined up with another usurper, Carausius, commander of the Channel fleet, subsequently routed by Constant. During the Diocletian age, a comitatense Legion derived from **I Minervia**.

LEGIO II ADIUTRIX

Its origin was quite strange: it was in fact formed by sailors taken from the Ravenna

fleet who, during the military anarchy in 68-69 A.D., had declared themselves favourable to Vespasian, who consequently named it **pia fidelis**. The **II Adiutrix** was posted in various provinces: in the Gauls to put down Civile's uprising, finally crushed in the year 71; around the years 86-88 it was situated in Britannia though one knows not precisely where since it left traces in **Deva** (Chester) and **Lindum** (Lincoln). Shortly after it moved again to Moesia, and that is why it fought in the wars against the Dacians both under Domitian and Trajan. After 106 it was permanently posted to Pannonia with its headquarters in **Aquincum** (Budapest). Under Antonine Pius, it subsequently took part with some contingents in the operations in Mauretania and during Marcus Aurelius' tormented reign it defended both the Eastern borders against the Parthians and the Western borders against the Barbarians. Having moved to **Brigetio** in Southern Pannonia, it fought with Septimius Severus and Caracalla against the Alemanni. Its presence in the East against the Persians is documented in Alexander Severus' operations and in 242 in Gordian III's. After the Diocletian reform, two comitatensi Legions derived from the **II Adiutrix**, one in Pannonia and the other in Britannia.

LEGIO V MACEDONICA

The Legion had pre-Augustan origins: probably recruited by Brutus, it also fought in Philippi. During Augustus' reign, it was first destined to the East and then posted in the province of Moesia, in **Oescus**. With Nero on the throne, it subsequently took part in the campaigns against the Parthians headed by D. Corbulone: its presence in the Pontus is certain. From the year A.D. 67 its headquarters were in Judea where, under the Flavians' orders, it helped to suppress the Jews' violent rebellion, which ended with the taking of Jerusalem and the destruction of the Temple. In the Domitian age it was again posted to the Danubian border: from the years 85-86 it was on garrison in **Oescus**, fighting against the Dacians. Trajan moved it immediately afterwards, posting it to **Throesmis** and employing it in the two Dacian campaigns. After that, its permanent headquarters were set in **Potaissa**, in the Dacian part occupied by the Roman forces. In this final site, which it garrisoned for at least a century, the Legion became an essential foundation for the Romanization of the region: in fact the **V Macedonica** left its quarters only when Aurelian (270-275) planned to create new boundaries to the Danubian *limes*, thus leaving nearly all the Dacian territory. The Legion was once again deployed around **Oescus' castrum**, remaining there as fighting force for centuries to follow. In the late Imperial age under Galerius, Diocletian's *caesar*, it fought a victorious campaign against the Persians in Greater Armenia. It is also known that still

during Diocletian's reign, a Legion known as **V Macedonica** and probably derived from the original formation, was deployed in the new Egyptian province of **Herculia**.

LEGIO XIII GEMINA

Little is known on the origin of this unit; however, it is certain that after the year A.D. 9, its permanent headquarters were in **Vindonissa** (today's Windisch in Switzerland). Around the years 45-46 it was sent to the camp in **Poetovio**, in the Pannonian province. During the Wars of Succession determined by Nero's death, it first declared itself favourable to Otho, for whom it fought and lost in Italy, and then to Vespasian. In subsequent years it was transferred from **Poetovio** to **Vindobona** (Vienna). It took part both with Domitian and Trajan in the operations against the Dacians: in the end, having been destined to garrison in the new province, it set its headquarters in **Apulum**. In 249 the emperor Philip sent part of the legion to **Aquileia**: in the following war against the usurper Decio, the emperor was beaten and died in battle. Around the year 261 the Legion's headquarters, probably with most of its units, was sent on the river **Mehadia**, in the Southern end of the Dacian province. When Aurelian left Dacia, the **XIII Gemina** moved to **Ratiaria**, in the new province **Dacia ripensis** formed with the territory which already belonged to Moeria, and being divided in many mobile units it had the task of controlling the boundary based on the Danube's right bank. During Diocletian's reign, it formed a Legion destined to be on garrison in Egypt. Moreover, around the year 296, it fought with the veterans, in the suite of Diocletian's *caesar* Galerius, in the victorious campaign against the Persians, during which the ancient capital of Ctesifonte was occupied.

Annamaria Liberati
Francesco Silverio

NOTES

(1) The typology of the representation found an appropriate correspondence in the books preserved in the two libraries, Greek and Latin respectively, situated at the sides of the Column.

(2) Considering the basement we reach 39.83 metres.

(3) The relief was made after the column had been mounted and going towards the top it increases in height to neutralize the optical effect caused by the distance, so that all the bands seem the same height. Despite the recent restoration, the original colour of the relief has not yet been demonstrated; most of the weapons and tools employed by the soldiers were however made of bronze and very carefully applied to the figures. This certainly contributed to a pictorial effect and an efficacious sense of depth.

(4) The pomerium was formed by an ideal strip of land which surrounded the city, thus forming the sacred belt.

(5) Theodosian Code VII, 1.1.

(6) Polybius, *Historiae*; Hyginus, *Liber de munitionibus castrorum*; F. Vegezio Renato, *Epitoma Institutum rei militaris*.

(7) The centurion formed the intermediate cadres of the military chain of command. Appointed by the tribunes and coming from the troop, he was of the utmost importance because he was entrusted particularly important tasks such as the maintenance of discipline and the command of minor units in the conflicts.

(8) The crowns, mural or of the valleys, were granted to those who first attacked a stronghold and penetrated the enemy camp respectively.

(9) Vitruvius, *De Architectura*; F. Vegezio Renato, *op.cit.*; Ammianus Marcellinus, *Rerum Gestarum*.

(10) As a rule the auxiliary units were under the command of *praefecti* coming from the equestrian career. The *cohortes miliariae* and the *cohortes civium romanorum* under the command of *tribunes* were the exception to the rule.

(11) In this period a legion had about 6,000 men.

(12) The term legion really means detachments which formed part of the forces to be employed, according to contingent requirements, in those provinces which were threatened by an armed intervention.

(13) These Legions were under the direct command of the Emperor and formed the mass of the manoeuvre army.

(14) These formed units coming from the Legions which, located on the boundary, had become a kind of boundary militia of peasants.

II century A.D. legionary in battle dress as seen in the reliefs of the Trajan Column.



Type of Dacian combatant.

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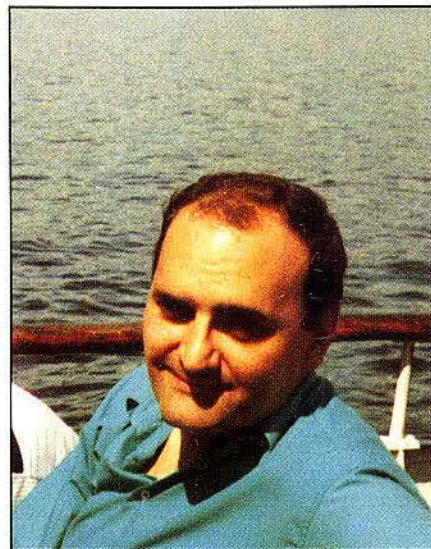
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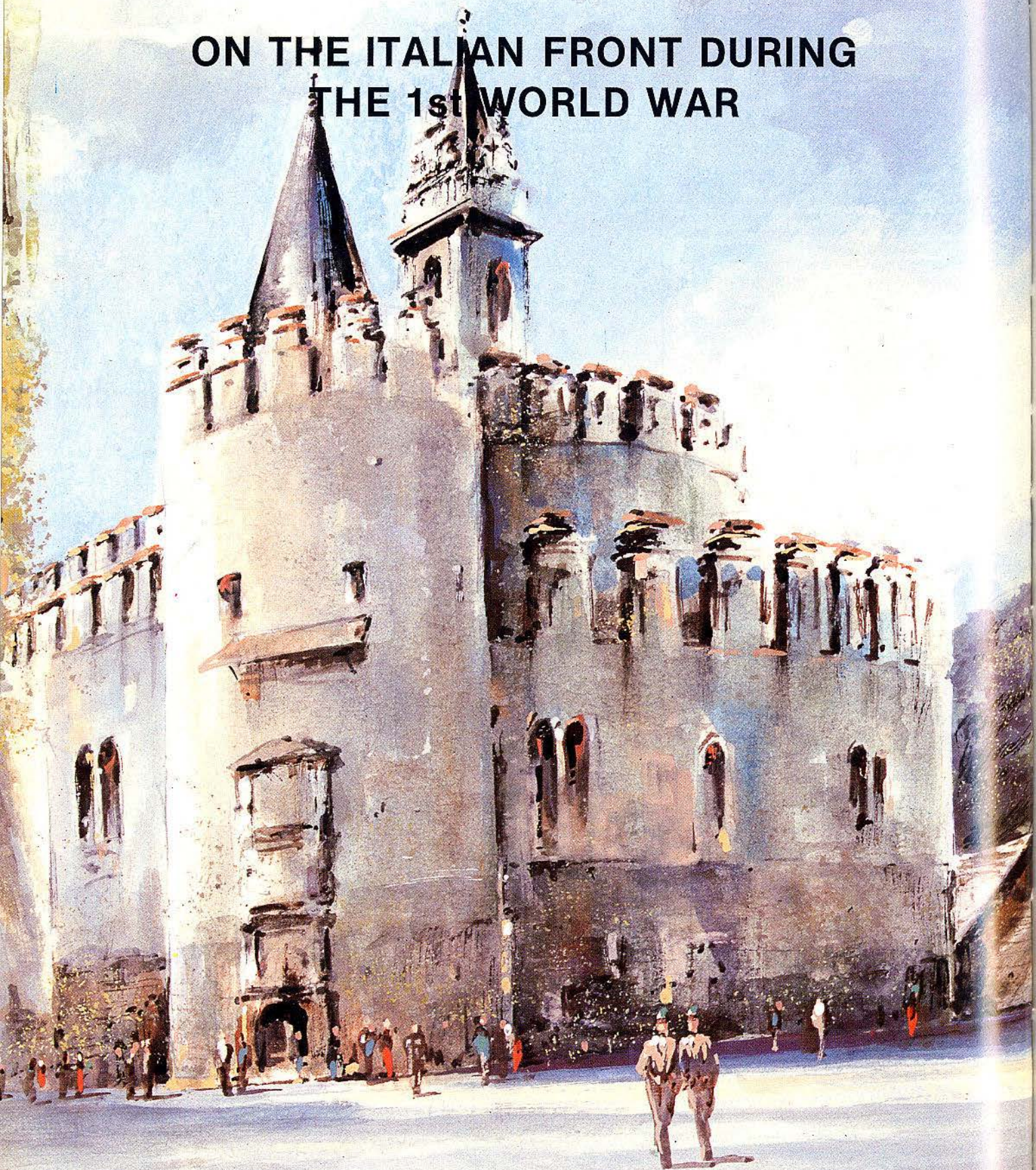
Annamaria Liberati is an archaeologist of the museums, galleries, monuments and excavations of the Sovrintendenza Antichità e Belle Arti of the municipality of Rome. Author of many articles and publications, she took part in several exhibitions and meetings in Italy and abroad and has taken care of the scientific coordination. She has been asked to direct the creation of a collection of books on the life and customs of the ancient Romans and she has been advisor and director of radio and television programmes on history and archaeology. At present she is the director of the Rome Museo della Civiltà.



After having attended the 5th course of the Police Academy, assistant deputy questor Francesco Silverio has occupied several posts in departments of the Home Ministry. He is an expert of ancient military art and has taken part in several meetings on the subject. He is also the author of publications. At present he is the director of a police office in Rome.

RUDYARD KIPLING

ON THE ITALIAN FRONT DURING
THE 1st WORLD WAR



Following is an interesting research carried out by "Rivista Militare Europea" on Rudyard Kipling's visit to Italy, especially on the front of the First World War.

Kipling came to Italy for the first time in September 1890 and then returned with his family several times in the years before the first World War. He thus knew Rome very well when he arrived here as war correspondent on 1 May, 1917. On this occasion Kipling was accompanied by his friend Perceval Landon, who had been correspondent of the Times during the Boer war.

This visit to Italy was the result of an invitation by the British Ambassador in Rome, Sir Rendell Rodd, in May 1916. Rodd seemed concerned by the fact that the bearing and the expenses the war meant for Italy were hardly taken into consideration in England and he disapproved of the British official bodies who did their best to be gratuitously offensive as regards the Italians. Propaganda in Italy was in the hands of Northcliff who was also responsible for the propaganda in the enemy countries and Lloyd George had given the Italians a particularly obliging speech... "In fact, war is like a football match..."

The ambassador thus suggested that famous English writers should be sent to the Italian front and vice-versa and that their articles should be published on the national and allied press. He was an admirer of Kipling whom he had had the opportunity of meeting in London and then again in Rome. In exchange of Kipling, Ambassador Rodd wanted D'Annunzio to go and see the British forces on the Western front.

Other English authors such as Conan Doyle had been on the Italian front in 1916 and had written articles, books and pamphlets. Kipling, still very depressed by the death of his son at the battle of Loos, hesitated a long time before accepting the invitation on 16 April, 1917. There was not much time left to organize the trip and Kipling and Landon had to reach Italy without any official plan having been made. Once in Italy, the organization was excellent and Kipling was able to meet all the important people, from the king to Cadorna, from Ambassadors to Cardinal Gasquet.

During the first part of his trip, while he could still send his mail to London through the diplomatic bag, Kipling wrote to his wife almost every day. His letters are very accurate as regards hours, dates, places and menus and were mostly written a few hours after the events they describe. They clearly show how attracted Kipling was by our country and its people.

A few days after Kipling returned to London the letters were published on The Globe. Reuters organized a press conference and the articles on the Italian front were published on the Daily Telegraph and the New York Tribune.

Il Messaggero, 8 May, 1917

RUDYARD KIPLING IN ROME

Rudyard Kipling, the famous English author, arrived yesterday morning in Rome. The author of Kim and many other beautiful literary works of art will soon visit the front of our war. We give the great poet our warmest welcome.

Il Messaggero, 9 May, 1917

A GUEST

Rudyard Kipling is in Rome. The great English writer who, after Kim, has sung with the impetuosity of the poet the glories of the Anglo-Saxon imperialism and sustained with enthusiasm the fairness of this war which will have to mark the end of militarist autocracies.

Rudyard Kipling will visit our front and we feel certain that his authoritative voice will join the

other voices — not many, unfortunately — which in England have rendered justice to the effort of our country to the considerable contribution that Italy has given so far to the cause of the Allies and will continue to give to the victorious end of the war.

L'Idea Nazionale, Rome 9 May 1917

RUDYARD KIPLING SEES MINISTER SCIALOIA

Rudyard Kipling arrived yesterday in Rome and is staying at the Grand Hotel. This morning at half past ten the famous author was received by Minister Scialoia.

They talked at length and in a very friendly manner.

Rudyard Kipling then returned to the hotel. He will leave Rome this evening to visit our front.

L'Idea Nazionale, Rome 16 May, 1917

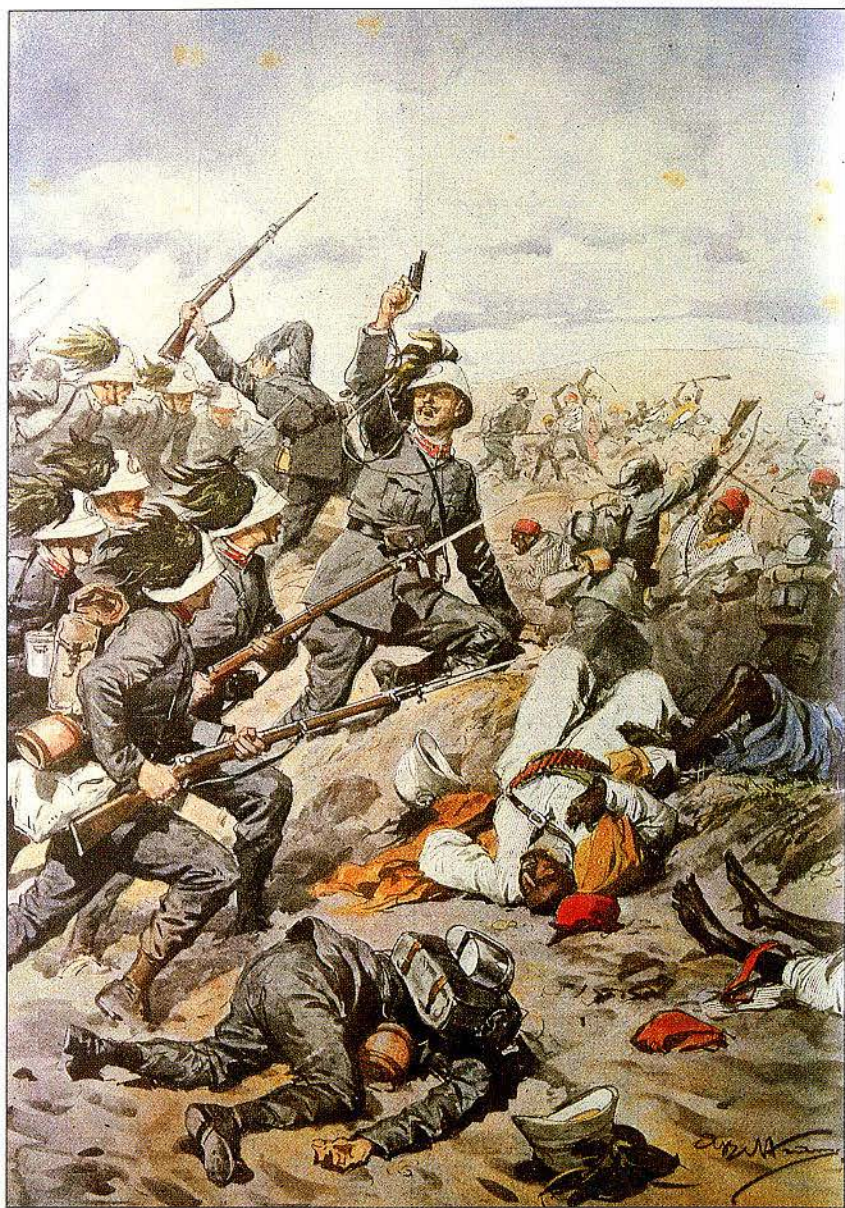
KIPLING ON THE ITALIAN FRONT

Headquarters, May

The great English author Rudyard Kipling visited our front after visiting the Franco-British front. He was accompanied by the journalist Perceval Landon of the Daily Telegraph, of Anglo-Indian birth, like Kipling.

Despite his health which is not very good (the poet is 52 years old) Kipling made his excursions on the front of the Isonzo, in Cadore and on the Trentino front, with the keen curiosity of his best years as war correspondent and of a very good walker. He seemed more tired on his arrival than when he left.

The author of the *Book of the Jungle* and *Kim* who did not know Italy accepted with the joy of the



I nostri eroi: a Kars-Bu-Adi, il capitano Ciaraldi, ferito, si slancia tra i primi, gridando: "Bersaglieri di Lamarmora, avanti!"
(Disegno di A. Beltrame)

author and the pride of the ally all the wonders of this trip and this could easily be noticed by whoever accompanied him. The great praiser of nature and of every new human activity, seemed enthusiastic of the unsuspected energies this land showed him. Before leaving he wrote in the album colonel Barbarich — head of the press office of the Higher Command — keeps for allied visitors' signature, the following sentence of gratitude for the beauty and the strength he witnessed

during his stay: "Have seen a new world, a new war and a new Italy", Rudyard Kipling, 12 May, 1917.

Il Giornale d'Italia, Rome 8 May, 1917

RUDYARD KIPLING IN ROME

This morning the great English poet, Rudyard Kipling, arrived in Rome. He intends to visit the Italian front.

Our warmest and most respectful welcome to the famous author who

is rightly considered the legitimate representative of the English national spirit in its highest virtues.

Il Giornale d'Italia, Rome, 16 May 1917

RUDYARD KIPLING ON THE ITALIAN FRONT

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The Globe, Saturday, May 19, 1917

MR KIPLING'S CONFIDENCE

Impressed with the zeal and energy of our ally

Mr Rudyard Kipling has just returned from a visit to the Italian fronts on the Carso, Isonzo and Trentino, and has given some of his impressions to a representative of Reuter's Agency.

Mr Kipling was allowed every opportunity by the Italian authorities to see all that he desired and is full of enthusiasm for what the Italian Army is doing, and is full of confidence in their ability to conquer.

He spoke with the keenest admiration of the physique, the zeal and energy of the Italian armies, as well as of the mechanics of Italian transportation in the face of the problem, "almost unrealisable in England" of warfare among mountains and snows.

This aspect of the campaign has evidently greatly impressed Mr Kipling, for he dwelt emphatically on the manner in which Italy has, as he said, "given battle in the third dimension and lifted her heaviest artillery to her highest peaks".

He expressed his belief that out of this war a new and revitalised Italy will arise, spiritually united by



Le uniformi dell'Esercito Italiano: come sono vestiti gli uomini combattenti per la grandezza della Patria.

(Disegno di A. Beltrame)

common effort, and materially transformed in its industrial development for the future.

Hotel Brighton
218, Rue de Rivoli
Paris

(before anyone is up)
6.30 a.m. May 2

Very dearest Both

Our channel passage (hope you got my wire) was in perfect weather with hardly a ripple. We were a sort of convoy us: a hospital ship: another hospital ship, I think Belgian, and fringe of destroyers. Don't suppose there was more than two destroyers but they produced the impression of a fringe. And we got in at 6.30 to find the Paris train started at 9.6 p.m. We were met by kind and adequate officers

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I prodigi della nostra artiglieria: un colosso d'acciaio sale verso un'altissima cima
(Disegno di A. Beltrame)

in the RTO line who took charge of us and told us that we should find lits-couchettes(?) reserved for us to Paris. It all went on wheels.

Mrs Kennard — a youngish woman, very tired with hospital work, came down to the quay in a car, took us up to the ramparts of Boulogne, then through square miles of hospitals into the country to see the cowslips and then to a little square court-yarded inn at the back of the town (La Bourgogne) where we had a very nice little French meal among French folk. It's too far from the quay for most officers. At 9 o'clock we went to our train; found all the baggage in the lits-couchettes (remember that trip to Vernet?) (1) and the RTO (2) very apologetic for the presence of a senior French flying officer who had taken the 3rd lit (the

compartment was ours). But we said it was his country and would'n't have him ejected. I spent a most comfy night (slept like a dormouse). Landon (3) didn't — he says.

Got into Paris in clear dawn at 5.45: went to Ritz which was asleep, all except one porter. Ritz was full. So round to the Brighton where one much overwhelmed person was sweeping out the dining hall. He has gone for coffee — toute de suite — I am writing in the little hall. L. is reading the paper and it's Paris — Paris all divine in the morning light. Now when I get my room, I wash and shave and go to bed — not because I need it, but it's a fine safe place to keep unbeknownst in. Then the Rome train tonight. I do really think this is going to be a comfy journey. L. swears the

French flying officer — who was enormously fat and thick — kept him awake with snoring. I never heard a sound 'twixt 10 p.m. and five. Our train was about 300 yards long and progressed about 15 miles per hour.

And I am ever and always
Your belonging

(1) Vernet-les-Bains, Pyrenees Orientales, a favourite winter holiday resort of the Kiplings before the War. See Carrington, Page 482.

(2) Railway Transport Officer; a British military officer to be found at railway stations which have much military traffic.

(3) Landon, Perceval, (1869-1927) Barrister, Dramatist, author and special correspondent. Friend and companion to Kipling in his middle years. Largely ignored by the biographers.

Hotel Brighton
218 Rue de Rivoli
Paris

May 2. 1917

6.30 p.m. No. 302 (the room in the middle of the landing going to 301 which John (1) had)

Dearest and most Dear,

There is but one mail, as far as I can make out, to England and it leaves Paris at 7.30 a.m. which means that, early as I wrote this morning I must have missed it. So write again to explain ourselves and our movements. It was an interminable morning. We arrived before the milk. Never do that because you can't have your coffee before eight anyhow: and we wanted coffee and when we had got it, and were clean — or at least cleaner — we telephoned to the Gare de Lyons to know what berths had been reserved for us for Rome tonight. After much delay came the reply that there were none. So off we went en auto to the Gare de Lyons at 9 a.m. and there we were, as usual, herded into an interminable file of people waiting to reserve places. It was all laborious and official and teasing but suddenly — it was Landon who subjugated her — a bare-headed female employee of the company took us in charge and steered us by ways we should never have found out for ourselves, all across the gigantic station to the Wagon-Lits offices, where she stood over us basking in our reflected glory — such as it was. The Wagon-Lits people knew nothing of any reservations — no one had been to them — and were rather doubtful as to our getting any places to Rome inside of several days. Then I played Paul Cambon's (2) letter which broke the ice into large pieces. There was no possible place for tonight but if we went to the Head Office, 5 Bld. des Capuchins we could get places for tomorrow night, and that is exactly what we had to do. Evidently there is a sort of no-man's land between the kind offices of the

British Foreign Office (3) and the Italian Administration and till we reach the Italian frontier we must fend for ourselves. Neither of us object in the least to the extra day here tho', of course, it would have been better to have gone on. We had a nap after lunch — an exceedingly good lunch — and tonight we go and take dinner at the Ritz at 8 o'clock. The old concierge is still here. The head waiter calls himself an Egyptian, but he really comes from Assiout and talks both French and English. He is a Berber or a Sudanese.

To-day has been deliciously warm throughout. The leaves in the Tuileries gardens are out and spring seems a fortnight ahead of us in England. Paris is fuller than I have seen it — more people, more taxis and a general air of business doing. Food restrictions do not seem to exist: the bread is extremely good and the amount of green vegetables on sale in the streets is very astonishing. But the blackness of the garments strikes one more and more. More shops are shut but those who do business have more business and there appear to be ever so many more English officers in Paris than last time. The Americans are out in force too; holding their heads high and talking loud in the Rue de Rivoli, the Rue Castiglione and the other places that they inhabit.

I got my article in the *Revue des Deux Mondes* which I am posting to you. It reads very well. I have, honestly, reduced my consumption of tobacco to an extent which would astonish you. I find every conceivable want and thought of mine, anticipated and cared for in my packing at every turn, and now I will, very gingerly, extract a white shirt from bag No. 1 and get into it, that I might not disgrace Bateman's (4) at the Ritz.

This goes — I am afraid — with the letter that I wrote to you in the dawn of today, at least a century ago. It takes enough affection for several, and I'll send you a line to-morrow on the eve of our departure. I don't know whether our letters are censored from the French side. If so I can confirm — what I have long suspected — that they keep a special brand of officer to be censor.

Ever your Rud.

Take note

In the wire Landon sent, the *Telegraph* sent it back asserting that there were two Burwashes in England and therefore the county also must be indicated! You can't get ahead of the official mind.

(1) Kipling's only son. He was a lieutenant in the Irish Guards, and had been killed in France at the Battle of Loos in September 1915.

(2) French Ambassador in London. The letter is in the Kipling Papers at Sussex University.

(3) Letters at Sussex University suggest that the War Office was responsible for making the travel arrangements, but as Kipling did not decide to go to Italy until the 16th April, it is not surprising that the arrangements had not been made.

(4) Kipling's house at Burwash in Sussex.

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Le nostre truppe espugnano la forte posizione di Monte Coston, sull'altipiano a nord-ovest di Arsiero.
(Disegno di A. Bistrone)

It is now owned by the National Trust and is open to the public.

Brighton May 2

Wednesday 10 p.m.

(I will not write at the wrong end of the paper)

Just back from the Ritz. I was wrong when I said there were no food restrictions. It was meatless dinner at the Ritz. So we had hors d'oeuvres; boiled turbot with a sauce rightly named Divine; eggs in small pots (en cocotte) with asparagus tips; eggs were fatigued but

asparagus was quite young; then a beautiful cauliflower au gratin and black coffee. The whole 33 francs which I don't call excessive. The Ritz is chock full of soldiers but they mostly dine at the cheaper places.

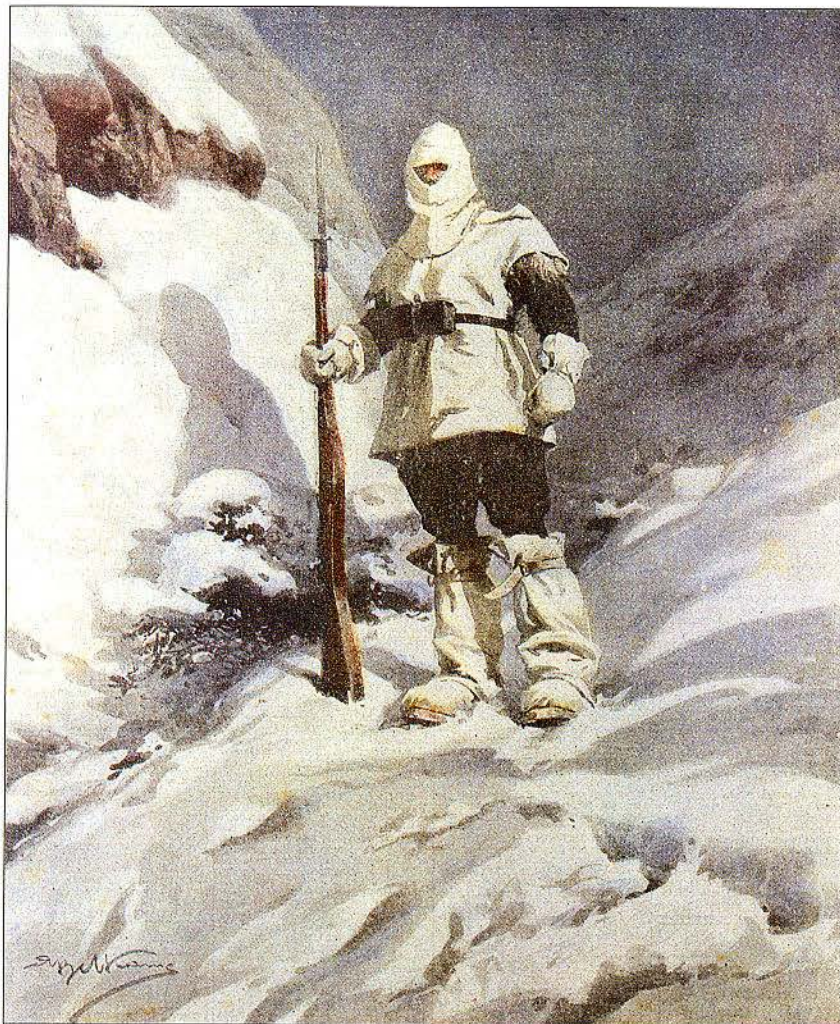
We met there — he came over to speak to me — Major Rock and his bride. She is small, rather flat-faced very composed and very eloquent American child of the type who has had her lightest word much hung upon. She is extreme cosmopolitan and I should imagine believes herself to be serious. There were touches of the L.H.J. about her as she expounded the Italian situation to me and she was good enough to approve of the general efforts of the English. It amused me a good deal. Rock is

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Sugli estremi limiti della guerra: una nostra scorta avanzata, nella pittoresca tenuta invernale.
(Disegno di A. Beltrame)

not yet past the stage when his eyes sought hers. Landon, whose evil acquaintances are unlimited, ran across Mrs Elinor Glyn who was just going out. So — Allah be praised — I was not introduced. After dinner we met (I didn't) A'Court Repington (1) and a F.C. man called Lygon (2) who was a friend of young Hartingtons and said he was most charming. Got out at 9.45 into a still warm night and so home and to bed.

Thursday 10 a.m.

A splendid night's sleep till 8 a.m. which, after three hours solid "doze" in the afternoon

is not so bad. Since then I have devoted myself to packing with a single mind and the intelligent help of the chambermaid. The white shirt which I wore last night goes back into the suitcase quite fit for fresh adventures at the Vatican: and nothing has been left behind. You were quite right. Everything that my wildest desires could conceive has been met and forestalled in my suitcases and, if you could see how they have been repacked you would admit, I think, that now and then, I really have my mind about me.

Yesterday, Landon complained of not feeling quite the thing — "queasy" was his word. So I gave him one calomel tabloid which has been blessed unto him. On such occasions as

these a man's chief preoccupation is his innards.

The concierge — who desires to be remembered to you and to Ada — advised us to do, what we had already decided upon — i.e. to go down to the Gare de Lyons at 6.30, get our dinner there in comfort and ascend into our wagon-lit in ample time. There are plenty taxis in Paris but as evening comes they do not like to take long fares but prefer to frisk about from restaurant to restaurant.

I honestly don't think there is anything else to tell you my dears: except that I saw this morning a little bery of maidens going to their Confirmation in white robes followed by male relatives in uniform and female relatives in mourning — a sharp three colour contrast down the bright street. It's a beautiful warm day with never a cloud in the sky and I hope and pray it has reached you.

L. who looks out for coincidences, says he wouldn't be in the least surprised if Lloyd George (3) were in our train for Rome. He is somewhere on the continent I believe.

Now I will go and provide myself with postcards which I can shoot off at you at the various stations. Allah knows if they will arrive in less than three or four days. Write me all your news to the Embassy at Rome.

Ever and always

Rud

(1) This would have been LtCol Charles A'Court Repington, (1858-1925). Rifle Brigade. Had served in Burma and Africa. Military Correspondent of The Times 1904-18. Author of *The First World War 1914-1918* Constable, 1920; in Vol. 1, page 557, he describes a visit to Paris at this time.

(2) Could have been one of the two sons of the Earl Beauchamp, Major the Hon Henry (1884-1936) or Major the Hon Robert (1858-1952).

(3) Lloyd George went to Paris on the 3rd May for a conference on what was to be done in the face of the disastrous failure of Nivelle's offensive.

Friday

May 4th: 9.30 a.m. (on train)

Just going into Modane. Same old wagon-lit: after a good night and a pleasant journey we are running up to time. Much love. Smell of 2nd class next to us vividly reminiscent of our Italian experiences. The soldier servant with officer aboard. Grave but quite uninterested in these foreign parts.

Buffet de la Gare
Modane (Savoie)
Le 4th May. 1917
Friday: 12 noon

This is a wonderful world. We got into Modane at 10 as I wrote in my P.C. and were met by a lean, youngish, English Railway Transport Officer of the name of Clarence who had had instructions to look after us; which

he did very nicely indeed. Incidentally the lady who ran the buffet (she came from Dijon) professed herself a profound admirer of La lumiere qui s'etient whereby we were taken into an inner room and given coffee in cups de luxe which was most grateful. Then we went for a walk up the valley with the R.T.O. whose interests were etchings, primitive man, mummies, and art generally on which he and Landon talked with great sympathy. Imagine the road down from Engelberg (1) after the valley opens — a roaring river of snowfed water full of grey pale boulders, overhung on one side by houses of pale grey, thus and crossed at intervals by raw timber bridges of silvery grey. On the other side the hills going up sheer in tumbled rock and shale with the usual little hardly won terraces in the sides of them — just like Vernet. Then as the valley widens, the carefully kept turf, studded with bunches of narcissi not yet out, a cowslip or two and microscopical cranesbill — the pruned and groomed orchards, and the brushed and combed fields of cultivation. One man was mourning over a field — rather bigger than Bateman's hall — on to which great rocks had fallen from the hillside above cutting and scarring the turf and breaking some young birch trees. The air was heavy with the warmth of spring but the snows atop of the mountains were not far off and there were glimpses through the clouds above us of solid snows. The R.T.O. has been here for six months. There are 3 feet of snow in the winter. He has only two people he can talk to and he has to deal with every sort of curiosity — naval, military, flying corps, civils, nurses and the rest of it. I saw some of the people — naval chaps and a few sailor men, quite calm and impassive. L. and I managed ourselves very well in the wagon-lit which brought back to me all manner of old memories. And oh the smell of the 2nd class!!

We leave here at 2.30 (Madame is making for us a lunch de luxe!) and I expect we shall be in Rome about 9 a.m. tomorrow. Dear love to you both. I just drop this scrawl that you may have an idea how comfy we fare.

Ever
Rud

(1) A resort in Central Switzerland, near Lucerne. The Kiplings spent several winter holidays there before the War (1905-1914).

Grand Hotel
Rome
Saturday May 5th 1917

10.15 a.m. to 11.20 a.m.
grey warmish and sticky

We got in on time from Modane: after a very good buffet dinner at Turin which we shared with a young Russian Naval Officer (six feet six long) whom we met in our train. Certainly no food restrictions seem to worry Italy. Our other companions were a doctor from Salonika who had been in the Cameroons show; a Major of Engineers who knew Greece

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Il bel colpo di un alpino: con un cappio ghermisco e fa precipitare una mitragliatrice austriaca con il sergente.
(Disegno di A. Beltrami)

and the Near East, and a fat cherry-cheeked Colonel of Cavalry who seemed to know pretty well all the rest. They were going on their way to Salonika. (1)

At Modane there was a strong detachment of our sailors — mostly "hostility" men on their way to the Mediterranean ports. One of them found a rubber ring and began to throw it at a hook in the wall. Someone stuck up a 1 lira note as a prize to the man who first made the ring stay on. In less time than you would think the affair developed into an orderly game; with a bright-eyed petty officer in charge, regulating the distance thrown, seeing that no one threw out of his turn and so on. Very occasionally someone made the ring stick

on the hook. Then L. or I put another franc as prize and the winner bored solemnly through the crowd to shake us by the hand. It kept 'em quiet and amused for nearly an hour. No one could have been kinder to us than Clarence the Railway Transport Officer and he is prepared to make everything comfortable for us on our return.

Once through the Mont Cenis we were in the full flush of spring — pears and almonds together in bloom; the young wheat nearly a foot high beneath and all the mountain sides pencilled and splashed with every shade of God's own greens. It began to rain there — a warmish growing rain — the kind we could do with in the valley at home. I have seldom

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Sopra battaglia per forzare lo stretto dei Dardanelli: le mine scoppiando affondano la corazzata francese "Bouvet", e due inglesi.
(Disegno di A. Beltrame)

seen such beauty. The campagna in the morning (oh how it reminded me of our trip!) was all grey and green with solemn silky white bullocks watching us. We got in punctually, found Rome much as she always is and have since been washing ourselves and arranging our baggage (you'd be surprised at my system and neatness) in the palatial suite of rooms which they have given us at 65 lira per diem. I can't see myself that there is anyone staying here particularly. Now I have just telephoned to the British Embassy and am waiting their reply. More anon.

6 p.m. So we went to the Embassy on foot in this heavenly warmth, with roses and

wistarias full out on all the walls and Rome at large looking as though it had't heard of any war. Rodd (2) was out, but sent us a note later asking us to dinner at 8.15, and we're going.

Then to déjeuner — extraordinarily good omelette and grilled chicken — a boiler. After that I went to the Borghese Palace to leave my card upon Count de Salis (3) with a note, in case he was out, asking him to see me. Landon was off on excursions of his own so when I came back I got into my — got out of my clothes and had a luxurious snooze of an hour before he came back. Then came a newspaper correspondent of one of the London papers not to see me at all but to give me some infor-

mation and attitudes here (I've got an idea that all letters are pretty carefully censored or at any rate pried into so I won't give you details except to say that I was glad — and so was Landon — that he came). Then we went to our palace-like sitting room (glad we were 'twas so palatial) to box a cup of cocoa and after that there came a Cardinal (4) — hat and all — an English gentleman of the most charming that ever was, accompanied by his secretary also an Englishman (5) but notably unlike a priest in that he contradicted his Eminence on certain matters. Well, conversation turned on a ceremony to-morrow at St Peter's where they are Beatifying a certain Carmelite nun who died 150 years ago and is now to be made the Blessed Anne of somewhere or other (6). His Eminence gave us the whole business of beatifying — how it's done and how long it takes and who decides on the evidence (there must be at least two proven miracles) and all the rest of it. I'd never heard it all told from the inside by an expert. The Cardinal is on the Board of Examiners or Committee of Admission for Blessed Ones. We talked of other matters too — very sensibly and humanly but somehow this detailed and serious account of a Beatification struck me as very — very wonderful indeed.

And he left amid bowed bare heads like a Prince of the Church which indeed he was and the hotel management humble before is now on its tummy. Then for a stroll with Landon among the shops. I wish I had the size of Ada's hand and I'd get her some gloves as I know she likes 'em. It was a sticky, grey, homesickish evening and I drifted up (L. was going to the Excelsior (7) to the Albergo Savoia (8) whose face had been washed and looks wondrous clean and I thought of you and the Bird and her measles long ago and grew sentimental. Then I returned and that is all my account of the day. I lunch with the Cardinal on Monday. He came to ask me. He'll be worth a wilderness of smaller folk for instruction. If I have anything special I'll send it in the Embassy bag.

With a heart's love ever
Rud

(1) There was heavy rail traffic from the Channel Ports, across France, Northern Italy, and down the East coast to Taranto, in support of the British Forces in Salonika and the Near East. The French used the line down the West coast and the port of Genoa.

(2) Rodd, James Rendell (1858-1941).

(3) De Salis, Sir John Francis Charles, 7th Cte de Salis, (1864-1939).

(4) Although not mentioned by name, this could only have been Cardinal Gasquet (1846-1929).

(5) This would have been the Cardinal's Secretary and life-long friend and companion Father Philip Langdon, known in Rome as "Don Filippo".

(6) Anne of St Bartholomew, (1549-1626).

Anne Garcia, born Almendral, Spain, daughter of poor shepherds. Joined St Teresa's reform movement at Avila. St Teresa's secretary. In 1606, sent to France. Prioress at Pointoise and Tours. Founded convent at Antwerp for English refugees. Author of some "delightful religious verse".

(7) Headquarters of the British Military Mission.

(8) The Kiplings had stayed at the Hotel Savoia in 1905 when Elsie ("Bird"), Kipling's surviving daughter, caught measles and their stay in Rome became protracted. Murray's Guide for the period gives an Albergo Savoia near the Piazza Barberini, già del Gallinaca, via Maroniti 5. This is on a hill near the Grand Hotel, and Kipling would therefore have drifted "up" to get there.

Grand Hotel
Rome
May 6th 1917 7 p.m.

Very dear,

Just my usual daily line to let you know that I am but this instant returned from the Beatification of Anne of St Bartholomew — a Carmelite Nun. The Cardinal sent us places which were good enough in themselves but — talk of coincidence — as I looked at the blaze and splendour of the Altar of St Peter I saw in the next block of seats, reserved for diplomats, a Chamberlain of the Pope (there are scores of 'em all about the place) in ruff, hose, sword etc etc who, for the moment struck me as one of the finest Rembrandts I'd ever seen. Then slowly through my mind as I stared passed the words: "I am so sorree!" (Elsie will understand) and as I looked and looked he turned and saw me and flashed into smiles. 'Twas Spinola! Dressed in the costume of his office. No wonder we thought he looked well at the Engelberg fancy ball! He came to us at once and said: — "The minute the Pope has come you may come into my tribune — or block of seats". Which we did. Result was we had absolutely the finest view of the ceremony anyone could by any means get. I saw De Salis among the diplomats but all my eyes and ears were for the ceremony which was beyond belief — in splendour, mass, colour and every grandiose appeal. There was only one hour of it: the main proceedings as far as the legal position of the Blessed Anne went having been got through in the morning where they read out her record for two hours I believe. The Pope (1) entered in his chair — a little dark man with glasses, very petit all over but with an interesting face. He said not a word, of course because Popes do not lightly speak. The prayer for peace was read almost at the beginning but most of the rest of the service was merely singing — I didn't much care for the singing. There were the Noble Guard — 12 of 'em in helmets: the Papal Guard in their uniforms, helmets and halberds; ...nuns and friars of every known description; Cardinals, Bishops and dignitaries of the whole

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LA FINE DI UN PIRATA. Un cacciatorpediniere inglese, recentemente, avvistato un sommergibile tedesco a meno di venti miglia, subito iniziò la caccia. Il sommergibile aveva evidentemente dei guasti, e non fece in tempo a sommergersi. Senza esitazione, il cacciatorpediniere gli mosse contro a tutta velocità e lo spacò in due.
(Disegno di A. Beltrame)

hierarchy and about — well Spinola said 60,000 people but L. and I thought it might be 20,000. In that marble sea of a place you can't tell to a thousand or even five thousand. I can give you no idea of the actual ceremony for several reasons but chiefly because I'd never seen anything like it. My impressions I will tell by word of mouth. At the end when the golden litter had left through a far door the whole crowd liquefied and flooded the Cathedral. L. and I were borne along in a stream of people who ceased to interest us — they squeezed too much — and we turned aside through a gap in a barrier, found a little door and ran literally into the arms of our Cardinal who very kindly took us home in his

car. Nota. Cardinal's car have an arm cushion like first class railway carriages so that you shan't joggle the Cardinal. I approve of that! 'Fact is I think Cardinals' motors are the only cars worth taking in Rome. I lunch with the Cardinal to-morrow and I don't think it will be time wasted.

So here I am at 7 p.m. in evening dress (how useful that evening dress will be none but you will know). The grey sirocco sky has cleared; there is a divine sun and the spectacle of the whole enormous crowd vomiting out of the steps of St Peter's in the afternoon light will remain with me till I die.

This is but a scrawl in haste to catch the post. I don't know what I do to-morrow but

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La sconfitta della decima armata russa nella Prussia Orientale: soldati russi che levano le braccia per arrendersi.
(Disegno di A. Beltrame)

I expect it will depend on the Cardinal. Sorry!
If he has actually arranged aught I shan't be
told of it till the actual moment.

Meanwhile I am still humbly
Yours ever
Rud.

(1) Benedict XV.

Grand Hotel
Rome

May 7 1917 6.30 p.m.

Dearests,

And — after seeing the Embassy this morn-
ing, in the course of which I bought a trifle
for Keene's child and some tortoiseshell combs
for you — Landon and I went to lunch with
Our Cardinal in his palace (1) which was part
of and built itself into a Benedictine monastery.
It was across the river (d'you remember our
drives on cold spring days in that direction?)
near St Maria Calista, a bit of Papal Rome
that I never knew before. Also it was quite
like a scene out of all sorts of novels. There
was the quiet brooding inner court facing a
square of hot sunshine; a covered cloister, a
climb up four flights of feet-worn stone stairs
and at last a long, long suite of rooms, till
the final one was all upholstered in yellow silk

with a portrait of the Pope (who, I maintain,
resembles Woodrow Wilson facially) and in
front of it a tall golden chair back facing us,
specially reserved for his Holiness when he calls.
(But I don't see how he can get out of the
Vatican to call!). Then, Our Cardinal emerg-
ed and said: — "Come into my den. I can't
live up to those yellow chairs" — and we went
into a little wonder of a study full of priceless
old prints and a genuine Holbein. The lunch
— artichoke omelette: beef: chicken and
marvellous ice-cream, with many curious wines
whereof I did not drink. There was only L.
and I and the Cardinal and his domestic
chaplain who was also general secretary. This
latter was of quite a new type to me. I never
knew before that domestic chaplains con-
tradicted Cardinals. Well, we talked and we
talked (the domestic chaplain talked most) for
about two hours. I am a low-minded beast and
I suspected from the first that we had not been
asked for nothing. We hadn't: but that is a
matter which I must tell you viva voce when
we meet. (This land rightly or wrongly gives
me the impression of being more full of eyes
and ears than a peacock's tail). Finally, we
were shown some priceless reproductions of an-
cient Bible texts. (There is a most learned com-
mittee revising the Latin Bible (2) in a long
room off the Cardinal's study). Also we were
shown the private chapel which he and the
domestic chaplain made by luck and spolia-
tion and the picking up of bargains — such
as a set of priceless XVth century choir stalls
and a 16th century entrance door and a few
other trifles. It was the Cardinal's Bateman's
to him and I think he really liked our delight.
It was a gem of colour and design under a
sbarrel-valuted roof — a mixture of greys,
greens and golds lovelier than aught Uncle Ned
(3) had conceived.

And so we got away — much — oh much
interested! This is the d-dest queerest trap-doorst
world I've ever got into. Nothing resembles its
external appearance in the least and when you
are told to go north-east it means you ought
to steer south-east. I shall be main glad to meet
real plain soldier men again.

And to-night at 8.15 I dine with de Salis
really to see Tony (4) but Gawd alone knows
what new signs and wonders I shall wander
into or what what is said to me will really
signify. Finally, to-morrow morn I meet a
minister without a Portfolio who is in charge
of Publicity and Allah alone can say what he'll
want. To-morrow even, God he thanked, we
leave for the Udine front. Three days in Rome
are ample and too ample for me. I wouldn't
have missed the Beatification I wrote you about
for anything but all the rest I can resign
without a sigh.

It's divine weather today. Scirocco has vanish-
ed and the skies are blue and fresh. I've been
for a meditative stroll on my own getting my
ideas into order. If only I had you to discuss
'em with! However, the straight road is always
the best. I am here to describe some aspect of
the Italian Campaign against the Austrians and
not anybody else's campaign against anybody
else. Landon is enjoying himself hugely over
the drama of the whole thing. His account (5)

of the Cardinal's lunch will interest you. He's off now on some job of his own and won't come to dinner with De Salis; alleging that he knows quite enough.

We have got seats in the sleeper for Udine to-morrow night. There is also a restaurant car on that train! Amazing land, which has not yet interfered with the Wagon-Lits Company. The streets are filled with more strong handsome well set up young knuts in civil dress than I can ever remember to have seen in the past three years.

Not a letter of any kind has come in from you but, on thinking things over, I can see that unless you wrote at once on my departure there is scarcely a chance, as the mails are sketchy. However there may be something to-morrow in which case I'll acknowledge by wire: but I am always

Your loving
Rud

- (1) The Palazzo San Calisto.
- (2) The Commission for the Revision of the Vulgate, the major task of the Cardinal until its completion in 1926.
- (3) Sir Edward Burne-Jones.
- (4) Count John de Salis's second son.
- (5) Landon's writings from Italy do not appear to have survived.

Grand Hotel
Rome

May 8, 1917 2 p.m. (a divine day)

Dearest,

I have just had the news by telephone that there is a letter for me at the Embassy (1), and while it is coming over I sit down to write to you. The scene has shifted to-day. Cardinals etc. have dropped out and their places have been taken by the Military-attaches (2): assistant attaches: big guns at Head-quarters and so forth. It is like one scene fading out and another appearing. All hands are united that we are to have no trouble and, by the look of things, I fancy that that will be the case. It is easy enough to get into the war zone but it is not so easy to get out unless — as will be done for us — we must break through a whole hedge of mutually suspicious arrangements put up between France and Italy. We had a military attache here for about an hour this morn discussing things. He said to me: — "Have you any photos?" Remembering you more than human foresight in this matter I said: — "Yes; lots". "All right", said he. "Then they can be used if necessary". Landon who had not a wife to provide him with spare photos fled out into the sun blaspheming to be photoed. They mayn't be wanted but if they are, it's just as well to have 'em.

Clarence the RTO at Modane is the king-pivot of all France-Italian arrangements. Everything seems to boil down to him and, as we his good friends, we shall have a good time. He can get us back into France without delays and can override the small official. Moreover, the luck that looks after Landon and me when we are on the war-path sent us to

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Abbondanti distruzioni nevicate in Italia: valanga che presso Tenda travolge un baraccamento, e uccide impiegati e operai
(Disegno di A. Beltrame)

day Colonel Gabriel (an ex Indian civil and old friend of L's) (3) now on duty at the Italian Commando Supremo. He may be going up to Udine with us to-night — in which case we shall be as Gods. Anyway the wheels are perfectly well oiled.

Today they "released" the news that I was in Rome. I rather wish they had kept it till to-morrow but no matter. I had a note from Miss Jay (Martha McCook's sister) (4) 6, Via Pideenza, asking you to lunch on Wednesday at 1.15. I told her that most unfortunately you were not with me. Then began the papers but as they have not been told my hotel they do not give much trouble.

My dinner at de Salis last night included Er-

skine and Mrs Erskine of the British Embassy: Gaisford and Mrs Gaisford of the Papal Embassy: Howard (de Salis's predecessor) (5) his two daughters and Spinola. Quite official. I only saw Peter (6) for a few minutes before dinner. A very handsome child with all Tony's (7) infernal cheek beautifully veiled behind his impish eyes. He is more like Count John than anyone else. His father said I should see him again after dinner but didn't call him. So I missed what I really went for.

Hurrah! Here comes yours of 3 p.m. Thursday 3rd. The first I've had and more welcome than words can tell. My beloved, if you don't get letters from me, it's the fault of the post and not of the poster. You ought to have got

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Come si dirige un'azione: il gen. Cadorna, il Duca d'Aosta, il Conte di Torino e il gen. Porro, mentre si svolge un combattimento.
(Disegno di A. Beltrami)

the wire from Paris also by now as well as a heap of letters for I write (as St Paul died) daily. But the mails are a law unto themselves. I have to-day sent you a wire telling you where to write to. As usual it is the invaluable Clarence, who is Guide, Philosopher, Poste Restante and all the rest to all the travelling world. Great joy about the Marks. It would be a splendid thing if they became a comfort to look upon and talk to in place of — the other thing. Lord how I wish you were along and how unfeignedly glad I am that you are not. Congratulations also — if not premature — to Mrs D.S. Thrush. Here the products of the dairy are limited to milk. Oh but it was nice and wholesome to see your dear fist once

again. Urge Bird to write — even though I have bought her naught unless she bags one of the "genuine tortoiseshell" hair combs. They were bought at the same place where I bought her her ramhead little brooch. If you remember?

Landon is much perked up with life and from gloomy pessimism advances to the position that we are going to have a splendid time of it. This shows he has recovered (a) from his calomel pill and (b) from being photographed in pure Italian by a very ugly girl. (He was a scared man!).

We leave to-night by the 8.50 and are not disturbed till 10 a.m. You ought to see me sleep in a wagon-lit! And it would do your

heart good to see me sleep — as I propose to do now — in the afternoon — a solid hour at a stretch. I say it's the heat. L. says it's my habitual laziness. Either way I enjoy it. Once again bless you both. I go my ways with a glad heart. Strange that one dirty little bit of very vile handwriting should so lift up the heart of a really educated man or, as the Idea Nazionale says a "grande scrittore e grande cittadino". Spinola sent all manner of greetings to you both. He is 36: he is head of a factory for making instruments — he wears a brassard green and white and red on his arm and he has no shame whatever that he is where he is. "Dodo" (the prince who was Mrs Hood's shadow) is married and has a baby.

And now I really will stop. I am provided with stamps etc. to write to you to-morrow but where I'll be Allah and the Commando Supremissimo alone know. Anyhow I'll be loving you.

Ever, Rud.

Venice. May 9th, 9 a.m.

En route Udine — after a splendid night in elegant wagon-lit. Grey soft weather: Venice looking like a pearl (8). Restaurant car comes on here. Delme-R wires he will meet us Udine at noon but I think we shall be a little late. Enjoying ourselves hugely.

Love R.

- (1) In the Via Venti Settembre.
- (2) Probably Col. Sir Charles Lamb, the MA
- (3) Formerly a Political Officer and resident in India. In Rome, he was Head of Special Intelligence at the Military Mission.
- (4) A Brattleboro connection?
- (5) Sir Henry Howard (1843-1921), Minister Plenipotentiary in British Mission to the Pope 1914-1916.
- (6) Count John de Salis's youngest son.
- (7) Count Anthony de Salis. Like Kipling's son John, he was an officer in the Irish Guards. He visited Kipling at Bateman's in January 1918. See visitors book for 23rd to 27th January 1918.
- (8) Kipling had visited Venice in March 1912, at the time of the Kaiser's visit.

Udine. May 9: 2 p.m.

...And so we arrived a little after noon at Udine which is large and scattered among green crops and has avenues of chestnut trees whose blossoms are already falling! There was a fatted ease about our progress in the wagon-lit which more or less prepared me for the two cars (one shut t'other open) which greeted us. General Delme-Radcliffe (1): an Italian Colonel (2) in charge of the pressmen; a young Italian captain who spoke exceedingly good English were on the platform and we moved so to speak on red carpets to this house which is marked in large letters as "a hospital for nervous diseases". I expect that was its walk

in life before the war. It faces an immense circle of roughly pebbled ground (3) from which roads and avenues radiate. There are railway lines down the roads (4) and occasionally a friendly train-load of low trucks goes roaring along or an officer on a spitting motor byke flees to some job or other. One avenue is bordered by a rushing canal of milky water on one side of which women wash; on the other there is a hospital for the wounded (5) who lie about in the healing soft sunshine. All the rest is cultivation, stone-pines and mounds on mounds of flowering chestnuts, with roofs of deep fluted tiles emerging, and here and there a factory chimney. My quarters are a bedroom with a wierd teutonic sort of bed: a real sofa and everything else in the way of luxury and as the warm idle wind walks — or rather strolls about this town, it bangs my shutters. There never was shutter in Italy yet that didn't bang. Delme-R and his next in charge Alexander (6) have gone off for their dejeuner (we had ours in the train) and we have tea at four. When I have expiated a little more I purpose to do a snooze. I have to see the King and Cadorna but whether to-day or to-morrow I know not. I resign myself into the hands of the Military which is a damn sight better than trying to fuss. Moreover, there are no hosts in the world like soldiery. Think of the pure boredom of having to meet civils of all kinds and temperaments, to take them around and to try to put some idea into their, opinionated heads.

3.45 And then came General D-R to tell me things and then we talked and discussed future arrangements. It appears that I see Cadorna to-day at 5.30 and the King to-morrow. I can't give you any idea of the excellence, or the amplitude or the smoothness of the arrangements. It appears that we are — very much so — the guests of the Italian Government who have a breadth of vision as to the duties of a host which fairly takes the breath away.

And now I close this to go to tea. More to-morrow, but as ever I enclose Miss Jay's letter which I had ought to have sent you yesterday. I thought any kin of Martha McCook would interest you.

P.S. This goes in the special bag and is posted from London. Hence the penny stamp and my dearest love.

(1) Chief of the British Military Mission.
(2) Colonel Pietro Andrian. Information from his daughter, Contessa de Scarpis, of Venice.

(3) The Piazza Primo Maggio, formerly the Piazza d'Armi.

(4) A steam tramway ran through the town and out to San Danieli del Friuli.

(5) There was a military hospital in the Via Pracchiuso, which leads off the northern corner of the Piazza. One of Udine's many small canals runs by this corner; so perhaps Kipling's quarters were somewhere in the immediate neighbourhood.

(6) Henry Lethbridge Alexander (1878-1944), later Major-General.

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Sul Carso, in mattina del 22 luglio: una nostra vigorosa controffensiva finisce con una vera rotta per gli austriaci.
(Disegno di A. Beltrame)

Udine
May 10. 6 p.m.

Dearests,

I don't quite recall where I left off. There were so many things to record. Anyhow my last letter to you must have gone off with the bag here just before I went to see Cadorna (1) at the Supreme Commando on the evening of the 9th. He was in a smallish (as palaces go) palace (2), scrupulously clean and austere, sitting so to speak in a large cool silence with very few visible members of staff around him. He was extremely nice and polite to me, and talked — as one in his place must — sonorous generalities to which I responded in my best

field French. The main point he bore upon was the creation of the new Italy unified — as up till now it has not been — by sacrifice. Then after that at 8 p.m. we dined in a little restaurant with General Delme-Radcliffe and Colonel Alexander — just Landon and me. It was on the edge of moonrise just before ten when we walked back to the quarters here. Udine at night is lit — for obvious reasons — with a few lights all dark blue. It's a beautiful city in itself — with a main square, a Cathedral and a few other old buildings all grouped together which are extraordinarily beautiful. The effect under the moonlight in the great square, dotted here and there with the blue lights was lovely beyond words. The

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La guerra moderna: come i soldati proteggono le rispettive posizioni e le difficoltà di superarsi per invadere il campo nemico.
(Disegno di A. Boltrame)

town was silent; the moonlight slashed the fronts of the old buildings and the arcades and loggias showed like pits of blackness. And so home and to bed in a room that somehow reminded me of pretty nearly every room I had ever pitched my tent in the East.

Next morning the 10th at 9.30 appeared Pirelli (3) our nurse — same as Puaux in France — a Cavalry officer and a millionaire being the son of Pirelli the motor-car tyre manufacturer. He and General Radcliffe accompanied us in a big closed car to see the country of the heaviest fighting of the campaign. It was a vivid light spring day; the roads were as white as bone and dry after days of wet. Every road was flanked by a little

flashing water channel and lined with piles of limestone pebbles from which every few hundred yards a couple of men or a man and a boy spread spadefuls of pebbles in every tiniest depression and worn spot, and poured water out of a tin can at the end of a pole atop. The incessant traffic of motor-cars, tractors and carts ground the stuff down almost at once and the water made it bind: so that, the heavier the traffic the better the road. It was a miracle to watch. The Italians are Princes among Road-makers. They make their roads save their vehicles instead of knocking the vehicles to pieces, and the whole land is seamed with new roads.

Round Udine the land is flat and cultivated

to the last inch wheat, vines and everywhere the closely pollarded gnarled mulberry trees: for this is great silk country. All round the horizon, with thunderstorms in their laps, lie the mountains just like the Himalayas. Some are white with snow, others only speckled: but they are all dark and forbidding. The rivers with their shoals and reefs of white pebbles, are all milky blue green with snow water and they rise and fall without warning. The farmhouses of any size; the country houses and the chateaux are all turned into hospitals — but one sees nothing of the wounded: and all along in the clean stone villages one passes masses of troops either at instruction or in reserve. These are much bigger men than you'd expect. They mostly wear two helmets and carry themselves with the swing of Roman legionaries. They are made up of all sorts of Italians mixed together — North, South, Central and the Islands. This is so that the losses shall be equally shared.

Presently our car came to the old Austrian frontier — the fringe of level ground before the hills begin. The houses here had been battered about a good deal but they were all rebuilt by the Italians who are as handy with stone and cement as the Canadians are with wood. Their neat-handedness impressed me enormously. Then we came to Gradisca on the Isonzo river — a great scattered town of hutments, cemeteries and all the rest and here the level ground stopped. Across the broad shallow river the land rose into ridges of a few hundred feet — say six or seven hundred — and the soil was red what there was of it — a sort of pocky conglomerate of stones, boulders, pebbles, stuck together with a little red dirt and covered with a false appearance of vegetation. But one knew without being told that the growth of the green was only due to the wet and would wither away after a few days' heat. A foot beneath the ground the land seemed to be solid limestone either in chunks or layers or nodules — impossible to dig in with spades — impossible almost to describe. It reminded one of the Karroo at times, only the bushes were scrub oak and pine stumps destroyed by fire. Every few hundred yards there were huge hollows and sink holes, some of them leading into caverns underground, which the Austrians had converted into shelters for whole battalions. And all this inexplicable mess was scattered with battered traces of old trenches, bales of red rusted barbed wire, and all the wreckage and debris of battle that you could imagine. The road wound up among the wreck till we came to a few pale walls singing to themselves in the thin noon wind. That was all that was left of the village of San Martino — that, and a petrol pumping engine pumping water for the troops in the far off trenches somewhere on the sides of the further hills. There was a little firing of heavy stuff and now and again one saw the smoke of a shell through the heat haze, as it fell on the crest of a hill. Once we heard a big thing overhead going about its job — from the Italians to the Austrians. Then we reached a desolate quarry as it were of splintered stone on the very top of a stony ridge.

That was St Michael (4) — which is their Ypres and their Hill 60 and all the rest. We were on the point No. 2. No 3 point had been taken and lost six times before they could get a hold on the hill and, in one way or another, there were between 50 and 60,000 dead somewhere along there. The dead Italians had been carried down to the side of the River Isonzo below us where they lay in mile long cemeteries. The Austrians had been simply buried under stones and stones and stones and tar and lime. You didn't need to be told it was a Golgotha. You felt it out in there in the clean sunshine under the blue sky — felt it as though it were midnight. It was a land apart from any thing else — it was the Carso and the Italians pronounce it with loathing. Unluckily it's the only open ground there is and they must fight down it on their way to Trieste. If the Karroo married the Matoppos the Carso would be child of that union. Well, we went, on foot, over those slivers of rent stone up to the top of the crest, (5) picking our way among the shell holes. A shell hole on stone is simply a funnel of finely shattered stone. There was a big gun speaking somewhere under the hill to the Austrians. No bombardment but a mere interchange of compliments before dinner. Suddenly there was an explosion in front of us, just like when Landon tried his blasting experiment at Keylands and the rocks began to whizz. Then came another and another and yet more. They were excavating a position for a gun somewhere below us and the noonday assortment of blasts had just been touched off and they had't thought to warn us. So we turned back from that place but for half one lively minute I was sure it must be "pip-squeaks" though commonsense told me that nothing less than six or eight inch stuff would reach us where we were. I don't like stones flying.

Then we went down to the reverse side of the hill and found enormous galleries where new big guns are coming in — a sort of T shaped tunnel eight or nine feet high full of rails and mechanisms. Then we came out into the dry staring sunshine all among the stones again and got into the car and fled downhill and recrossed the river into Gradisca, picking up Radcliffe who was colloquing with a General, and went on to Cormons (6) where we had a lunch with General Campello (7) who commands God knows what all on this front and will presently — I believe — launch a big attack. It was a simple businesslike lunch — curiously clean in all its appointments — cleaner to my mind than the French idea. After lunch we went forth again — Pirelli, Landon and I — to see Podgora (8) over against Goritzia. Now Podgora is a Gibraltar of mud — even as St Michael (9) was a Gibraltar of stone. The mud is now turned into hardest red earth but one realizes what a muck it must be when it is wet. Again the road left the plain and shot up and doubled and twisted for hundreds of feet until it reached the shoulder of this isolated Gibraltar. It is a hill sloped like this

We entered it by a boarded gallery of infinite steps that climbed up and up to the very top where there was an artillery observation

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Il valore dei nostri alpini: sei italiani resistono per cinque ore a più di duecento austriaci.

(Disegno di A. Boltrame)

post just under the letter "s" above. We were told not to show ourselves too much up above as we were in plain sight of the enemy. Below us, not half a mile away as the eye goes lay Goritzia — apparently untouched, till you let your eye search a little — and certainly without much life. As we looked and wondered and watched the Austrians dropped a shell on a convent just behind the town, we heard one of the Gunner subalterns talking to a pal through a telephone. Even I, who have no Italian could get the sense of the last sentence. It ran roughly: — "Congratulations. Then you'll dine with us to-night and you can pay for the drinks!" A youngster who was at that time doing observing officer in the citadel at

Goritzia below, had just got his commission as Aspirant — i.e. Sub-Lieutenant and — very rightly — would celebrate the occasion by standing drinks at mess that evening. We heard the laughter of his companions rumbling in the galleries beneath us.

And when we had seen and discussed all the hot sullen landscape and the frowning hills close by we returned to our car and went into Goritzia — in order that we might say we had been there. Goritzia in its hollow is amply and thoroughly and plentifully dominated by the enemy guns. They pepper it every day a few methodical 11 inch or even 15 inch howitzers. Hardly a house could I see that had not been shattered and pitted by shrapnel —



Trincea francese nella Champagne inondata dai tedeschi di petrolio e poi incendiata con le bombe: torrenti di fuoco sui soldati.
(Disegno di A. Beltrami)

the Cathedral was in ruins; and house after house had been laid down. But the Italians mend and clean up as quickly as the Austrians destroy. There were no holes in the streets and the rubbish was all carted away. There about 1000 people left in Goritzia still as well as the troops. They have the same delicacy of movement as the inhabitants of Soissons. Half the roads are screened by hanging mats, from the observation of the enemy: but in the main place the full stately chestnut trees are all in flower and the wind goes through them lazily. We spent about half an hour there, during which the Austrians very kindly did not send in anything (I couldn't understand why they don't break up all the bridges every day) and

then we came back to Cormons where I was taken to see a Radiographic hospital (10) run by Countess Helena Gleichen (11) and Mrs Hollings (12) which has been doing wonderful work. They have about half a dozen women assistants, including a Miss Hanbury Williams, who was at Rideau Hall when we visited the Greys there in Canada. They dress in khaki and their hospital — which was some sort of palace (13) — has a garden full of irises, and they have two cars to carry their apparatus and they are deeply grateful when they are allowed to go into Goritzia and practise their art there among explosions and gas shells. Certainly God made women most marvellously. Mrs Hollings had lost her only boy and so took

up this. Both she and Countess Gleichen have been affected by the X-Rays though I believe not to any serious extent yet. They have conducted close upon 6000 radiograph examinations. And we had tea and left them to their bravery and simplicity. We got back at 5 p.m. I had an hour's lie down and then went with the General to see the King (14) who was good enough to express a desire to see me. I found him in a room a little better, because cleaner, than John's quarters in the uniform of a full General in the field which isn't much more distinctive than that of a private. He is a man of amazing and elemental simplicity but every bit a man both of affairs and knowledge and guts. One felt that all through. He kept me over an hour during which he talked of the following, among other matters: — the Army; the people; foreign travel; his visit in 100 ton yacht to Spitzbergen; the Ionian Islands; agriculture; wolf-shooting and legends of werewolves; artillery; his experiences in Shadwell Docks for a fortnight; his visit to the Emir of Bokhara; apple trees; agricultural development; American ploughs; classic literature and about ten other things. He's a keen man and I shouldn't imagine had many illusions. So we parted, with mutual esteem and then to dinner — Pirelli, another Liaison Officer, Landon, D-R, Alexander and I, at the restaurant adorned with one of the hugest wistarias in full bloom that I ever did see. And so to bed complily at 10.30. It wasn't a hard day.

May 11th

Today we don't move out till after lunch. I didn't find any letter from you yesterday but I wish to state that your forethought in giving me tinted glasses made me quite happy all my trip. It's a strong hard light this Italian spring, and one has to treat it seriously.

Now I will close up. As I write to you day by day, though I had to miss yesterday, there's no need to tell you my movements ahead. In the first place I don't know 'em for certain: beig in the hands of the Military who make changes from time to time. In the second, even if I knew 'em I couldn't be sure where to pick up your letters except at Modane, where I hope the invaluable Clarence is sitting on a sheaf of 'em.

A heart's love to you and the Bird.
Ever, R.

(1) General Cadorna, Chief of Staff.
(2) Probably the Ginnasio Liceo Jacopo Stellini, then an Army HQ.

(3) Pirelli, Alberto 28 aprile 1882, Milan, tyre manufacturer, millionaire, cavalry officer, later to head Pirelli & C. di Milano. Author of several books on economics.

(4) Across the Isonzo, 5 km due East of Gradisca.

(5) Most probably Monte San Michele, as he mentions 'St. Michael' later.

(6) Hemingway's novel "A Farewell to Arms" is set in the town; his British Military Hospital was based on the British Red Cross Hospital at the Villa Trento at

S. Giovanni di Manzano nearby.

(7) Commander of the Gorizia Group of Armies.

(8) Appears on the maps today as Piedimonte.

(9) Monte San Michele, east of Gradisca.

(10) The 4th or Radiographic British Red Cross Unit.

(11) Daughter of Prince Hohenlohe-Langenberg. Her grandmother was Queen Victoria's half sister. Painter, sculptor and author of *Contacts and Contracts*, Murray, London 1940. Painted some battle scenes on the Isonzo. She had also provided some illustrations for Landon's book on the Younghusband Expedition to Tibet in 1903-4. She records in her memories that "Mr Rudyard Kipling and Perceval Landon came to see us".

(12) Hollings, Mrs Nina. Daughter of General J.H. Smyth CB, sister of Dame Ethel Smyth. Her son had been killed in France earlier in the war.

(13) They had four rooms in a villa owned by Count Zocco, an Austrian.

(14) Victor Emmanuel III, numismatist, said to have hated the Duke of Aosta (who was commanding the Italian 3rd Army), anti-Church (a mangiaprete), given to pedantry. A tiny man (only 5ft tall); even Kipling could look down on him.

May 11th 1917. 7 p.m.(1)

Oh Bird! I've just received your note of the 4th on my return from war among the Alps. An inconceivable trip at the height of 4000 feet, in a country to which the Engelberg valley is tame and of no account, over roads like the creations of giants. And all the while, above us — 3000 feet above us, on the eternal snows one saw the trenches of the Italians on the edge of Monte Nero (2). Conceive our Saint Louis trip multiplied by 50 and you'll get some notion of it. We passed miles of ambushed guns and looked out through hidden casements over seas of mountains at villages of Austrians crawling beneath our feet, thus: and all the time guns were booming one against another, lazily as they tried trial shots. They were 8" or 11" howitzers on our side: and when we climbed (or our car did) up to the very bare tops of mountains behold the grass was all pitted with shell holes. It's a war of giants among mountains. I looked into Tolmino and along 30 mile of Austrian front — wholly different from all I saw yesterday. The immensity of the landscape and the work dwarf all comparison. I don't know how on earth or in the clouds I can describe it (3).

We go off early to-morrow into real Alps: so I write this to give you all my love and to tell you how glad I am that Mother has

(at last!) learned the habit of resting after lunch. Also the news about the Marks is most cheering. This is a splendid climate but I will share it with you. If only you could be here to see the beauty of it all and to hear my curious adventures all along.

*Now I have to go to dinner. Dearest love,
Ever your Daddy.*

(1) The Xth battle of the Isonzo began at dawn the following morning.

(2) Now shown as Krn (2245m).

(3) Kipling was taken along the Kolovrat, a ridge which runs east of the Isonzo and along the present day frontier with Yugoslavia. They probably went north-east from Monte Corada parallel with the Isonzo, looking down into Tolmino (in Austrian hands) and across to the trenches on M. Nero. Then along by Cambresco, Livske Ravne, M.Kuk to Livek (Luico), returning through Polava, Cepletischis and Savogna to Cividale del Friuli and Udine. Alternatively, they may perhaps have gone beyond Livek to Caporetto (Kobarid or Karfreit on some maps), then back by Stupizza and San Quirino to Cividale. This would have been a journey of some 120 km, consistent with the '30 miles' of front. See Trevelyan 'Scenes from Italy's War', Pages 126-140.



Rudyard Kipling with a group of Alpini during his visits to the Italian front.

This photo, sent to us by Commander Peter Lewis of the Sussex University, is reproduced on the cover of the book "The war in the Mountains" published in Italy in 1917. We invite readers to inform us on the soldiers photographed with Kipling.

ENGLISH ITALIAN

GLOSSARY

D

D-day, s.

giorno predisposto per un'operazione tattica (specialmente il 6 giugno 1944, data dello sbarco alleato in Normandia)

dagger, s.

stiletto, pugnale

daily, ag.

giornaliero, quotidiano

d. bulletin

bollettino quotidiano

d. estimated position summary

ricapitolazione quotidiana della posizione stimata

d. general orders

ordini generali giornalieri

d. equipment status report

rapporto giornaliero sullo stato dell'equipaggiamento

d. inspection

ispezione giornaliera

d. personnel summary

rapporto giornaliero sul personale

d. resupply

rifornimento giornaliero, normale

damage, s.

danno, guasto, avaria, indennizzo, risarcimento

d. area

zona entro la quale potrebbe esplodere una mina

d. assessment

valutazione dei danni

d. control

controllo dei danni

heavy d.

danni pesanti

light d.

danno lieve

moderate d.

danno moderato

nuclear d.

danni da esplosione nucleare

damage radius

raggio dei danni

to claim d.

chiedere il risarcimento danni

d. threat

war d.

d. control centre

to damage, v.t.

danger, s.

d. area

d. close

d. signal

a d. to navigation

dangerous, ag.

d. cargo

dangerously, av.

d. exposed waters

to dare, v. dif.

the enemy would dare

any danger

the enemy dared us to

fight

daring, ag.

daring, s.

daringly, av.

dash, s.

to make a dash at the

enemy

the troops were full of dash

probabilità d'avaria

danni di guerra

centro per il controllo dei danni

danneggiare, avariare, far subire dei danni

pericolo

zona pericolosa

nemici in prossimità

segnale di pericolo

un pericolo per la navigazione

pericoloso

carico pericoloso

pericolosamente

acque pericolose (esposte al nemico)

osare, affrontare, rischiare, sfidare

il nemico affronterebbe qualsiasi pericolo

il nemico ci sfidò in combattimento

audace, temerario

audacia, temerarietà

audacemente, con intrepidità

slancio, impeto, foga, attacco

attaccare il nemico con impeto

le truppe erano piene di slancio

to dash, v.t.i.

the troops dashed at the enemy

date, s.

d. time group

d. line

due **d.**

at long **d.**

at short **d.**

datum, pl. **data**, s.

d. level

d. point

air movement **d.**

firing **d.**

d. link

map **d.**

d. administrator

d. bank

d. file

d. control units

d. collection and distribution unit

d. transmission and processing

d. acquisition

d. analysis system

dauntless, ag.

dauntlessness, s.

davit, s.

paravane **d.**

day, s.

ammunition **d.** of supply

d. of supply

d. fighter

C-d.

M-d

d. ration

to win the **d.**

to lose the **d.**

daylight, s.

d. aiming and observation periscope system

dazzle, s.

to dazzle, v.t.

to dazzle a ship

to deactivate, v.t.

precipitare, infrangere, infrangersi, frantumarsi

le truppe si precipitarono sul nemico

data

gruppo data/orario

linea di cambiamento di data

data di scadenza, data stabilita

a lunga scadenza

a breve scadenza

dato, elemento d'informazione, fatto, notizia, premessa

livello di riferimento

punto di riferimento, caposaldo

dati sul movimento aereo

dati di tiro

collegamento dei dati

dati cartografici

amministratore dei dati

banca dati

archivio dati

unità per il controllo dei dati

unità per la raccolta e la distribuzione dei dati

trasmissione ed elaborazione dati

acquisizione informazione

sistema per l'analisi dei dati

intrepido

intrepidezza

gru d'imbarcazione

gru paramine

giornata, battaglia, lotta, giorno

giornata di rifornimento munizioni

giornata di rifornimento

caccia da giorno

giorno d'inizio dello schieramento operativo

giorno d'inizio della mobilitazione

razione del giorno

vincere una battaglia

perdere una battaglia

luce del giorno, giorno, alba

sistema con periscopio per l'osservazione e il puntamento alla luce del giorno

abbagliamento, accecamento, (mar. mil.) mascheramento, mimetizzazione

abbagliare, mimetizzare

mimetizzare una nave

smobilitare

dead, s.

dead, ag.

d. angle

d. line

d. mine

d. space

d. zone

deadener, s.

sound **d.**

deadening, ag.

deadlock, s.

deadly, ag.

a **d.** combat

a **d.** enemy

deal, s.

a **d.** between nations

dearth, s.

death, s.

to be frozen to death

to put someone to death

to bleed to death

cause of death

death rate

to debark, v.t.i.

debarkation, s.

d. schedule

to debouch, v.i.

the army **d.** into the plain

debouchment, s.

debris, s.

to debus, v.t.i. (sl. mil.)

to decamp, v.t.

decampment, s.

decay, s.

radioactive **d.**

d. curves

d. rate

to deceive, v.t.i.

decentralization, s.

to decentralize, v.i.

decentralized control

deception, s.

d. measures

d. plan

electronic **d.**

to decimate, v.t.

to decipher, v.t.

decipherable, ag.

deciphering, s.

decision, s.

decisive, ag.

d. battle

i morti, i caduti

morto, deceduto, inerte

angolo morto

linea da non superare

mina inerte

zona ad angolo morto,

zona di silenzio

zona non battuta

ammortizzatore

isolante acustico

ammortizzante, isolamento

acustico, antirombo, in-

sonorizzazione

situazione insolubile,

punto morto

mortale, micidiale, im-

placabile

combattimento all'ultimo

sangue

un nemico implacabile

(pol.) accordo

accordo tra nazioni

scarsità, penuria (di viveri)

morte, decesso

morire assiderato

condannare a morte

morire dissanguato

cause di morte

mortalità

sbarcare, fare uno sbarco

sbarco

orario di sbarco (anfibia)

sfociare (di fiume), sboc-

care

l'esercito sboccò nella

pianura

sbocco, sfociamento

detriti, rottami, macerie

scaricare, far scendere

(da autocarro)

levar le tende

il levar le tende

decadimento, deperimen-

to, disintegrazione (di so-

stanza radioattiva)

disintegrazione radioattiva

curve di disintegrazione

tasso di disintegrazione

ingannare, confondere

decentramento

decentrare

controllo decentralizzato

inganno, confusione,

frode, insidia

misure di inganno

piano di inganno

confusione elettronica

decimare

decifrare

decifrabile

decifrazione

decisione, idea di manovra

decisivo

battaglia decisiva

d. superiority	netta superiorità	d. supporting fire	tiro d'appoggio in profondità
deck, s.	ponte (di nave), coperta	defaulter, s.	trasgressore, inadempiente, colpevole di infrazione disciplinare, soldato punito, consegnato
flight d.	ponte di volo, cabina piloti	defeat, s.	sconfitta, disfatta
loading d.	ponte d'imbarco	to suffer a d.	subire una sconfitta
main d.	ponte di coperta	to defeat, v.t.	sconfiggere, sbaragliare, rovesciare
to deck, v.t.	ornare, adornare, coprire, rivestire	defection, s.	defezione, abbandono, diserzione
to d. with flags	imbandierare	defector, s.	disertore, profugo politico
decker, s.	mezzo di trasporto a piani (aer.) biplano, (mar.) nave a due ponti	defence, s.	difesa
double d.	sbandieramento (di navi, vie, ecc.)	air d.	difesa aerea
decking, s.	dichiarazione	all around d.	difesa a giro d'orizzonte
declaration, s.	dichiarazione di guerra	antiaircraft d.	difesa contraerea
d. of war	dichiarare, proclamare, render noto	antitank d.	difesa controcarri
to declare, v.t.i.	proclamare la pace	civil d.	difesa civile
to d. peace	dichiarare guerra a	close d.	difesa ravvicinata
to d. war against	dichiarato	coastal d.	difesa costiera
declared, ag.	un nemico dichiarato	combined d.	difesa combinata
a d. enemy	velocità dichiarata	d. beyond the border line	difesa oltre confine
d. speed	annullare la classifica di segretezza	d. in depth	difesa in profondità
to declassify, v.t.	declino (di un impero)	d. in place	difesa ad oltranza
declension, s.	inclinazione, pendio, pendenza	d. on a wide front	difesa su ampio fronte
declination, s.	declinometro	d. stores	materiali di rafforzamento
d. compass	declinazione magnetica	hasty d.	difesa improvvisata
magnetic d.	declinare, rifiutare	line of d.	linea difensiva
to decline, v.t.i.	non accettare il combattimento	mobile d.	difesa mobile
to d. battle	decifrare	national d.	difesa del territorio nazionale
to decode, v.t.	azione di togliere il contagio, bonifica decontaminazione	nuclear, biological chemical d.	difesa nucleare, batteriologica e chimica
decontamination, s.	stazione di decontaminazione	passive d.	difesa passiva
d. station	decontaminazione nucleare, batteriologica e chimica	position d.	difesa ancorata
nuclear, biological, chemical (NBC) d.	decorare	d. readiness condition	stato di preparazione alla difesa
to decorate, v.t.	ricevette la Croce di S. Giorgio	perimeter d.	difesa perimetrale
he was decorated with the George Cross	decorazione, onorificenza	reverse slope d.	difesa su pendio inverso
decoration, s.	decorazione di guerra	self-d.	difesa personale, autodifesa
war d.	esca, richiamo per ingannare il nemico	temporary d.	difesa a tempo determinato
decoy, s.	nave trappola, esca, nave mimetizzata	territorial air d.	difesa antiaerea del territorio
d. ship	luogo di richiamo	unit d. area	zona difesa da un reparto
d. site	fatto, gesta, atto di valore, atto	offence and d.	offesa e difesa
deed, s.	le gesta dell'esercito in guerra	to fight in d. of one's country	combattere per la difesa del proprio paese
the d. of the army during the war	sottoscrizione di un atto profondo, alto	in d. of	a difesa di
signature of a d.	una ferita profonda	to make a d. against	sostenere una difesa, contro
deep, ag.	attitudine a guardare in profondità	defences, s.pl.	difese, fortificazioni, opere di difesa
a d. wound	campo di mine in profondità	defenceless, ag.	senza difesa, indifeso
d. fording capability		defencelessness, s.	incapacità, impossibilità di difendersi
d. minefield		to defend, v.t.	difendere, proteggere, fare una difesa
		the army d. the town against the enemy	l'esercito difese la città contro il nemico
		defender, s.	difensore
		defense, s. (amer.)	per defence

defensibility , s.	difendibilità	without d.	senza indugio
defensible , ag.	difensibile	to cause d.	causare ritardo
defensive , ag.	difensivo, s. difensiva	to delay, v.t.i.	ritardare, rinviare, ostacolare, differire
to be on the d.	stare sulla difensiva		ritardato
d. action	azione difensiva	delayed , ag.	ad azione ritardata
d. area	area di difesa	d. action	che ritarda, che causa ritardo
d. battle	battaglia difensiva	delaying , ag.	azione ritardatrice, di disturbo
d. capacity	capacità difensiva	d. action	distacco di contrasto dinamico
d. coastal area	zona costiera di difesa	d. detachment	scaglione di disturbo
d. fire	fuoco difensivo	d. echelon	manovra di disturbo
d. mine countermeasures	misure di protezione contro le mine	d. operation	posizione ritardatrice
d. minefield	campo di mine difensivo	d. position	delegazione, commissione, rappresentanza, delega
to defer , v.t.i.	differire, rimandare, prorogare	delegation , s.	una rappresentanza militare
to d. something to a later date	rimandare qualcosa ad altra data	a military s.	delega del potere
deferred maintenance	manutenzione in servizio	d. of authority	cauto, prudente, ponderato, premeditato
d. telegram	telegramma differito	deliberate , ag.	azione cauta
deferment , s.	rinvio della chiamata di leva	d. action	attacco premeditato
defiance , s.	sfida	d. attack	operazione di rimozione delle mine
to shout d. at the enemy	lanciare una sfida al nemico	d. breaching	attraversamento premeditato e pianificato di un fiume
to set someone at d.	sfidare, non rispettare (gli ordini)	d. crossing	difesa preparata in anticipo
to defilade , v.t.	riparare dalla vista, dal tiro del nemico	d. defence	consegnare, distribuire, lanciare, pronunciare
defile , s.	gola, passo stretto attraverso cui le truppe sono costrette a procedere solo in fila	to deliver , v.t.	salvare qualcuno dalla cattività
to defile , v.i.	marciare, procedere in fila	to d. someone from captivity	consegnare qualcuno al nemico
to deflagrate , v.t.i.	deflagrare, far deflagrare	to d. someone into the hands of the enemy	arrendersi
deflagration , s.	deflagrazione	to d. oneself up to	consegnare un messaggio
deflagrator , s.	deflagratore	to d. a message	fare un discorso
deflection , s.	deviazione (di un proiettile)	to d. a speech	resa, consegna, distribuzione, lancio, il pronunciare
to defy , v.t.	sfidare, provocare, offrire difficoltà insormontabili	delivery , s.	resa di una città
the fortress defied all attacks	la fortezza resistette a tutti gli attacchi	d. of a team	spedizione via aerea
to degrade , v.t.i.	degradare	air d.	dispersione (del tiro)
to defoliate , v.t.	spogliare, sfrondare (piante)	d. error	mezzi di lancio, di spedizione, di consegna
defoliating agent	agente chimico che fa perdere le foglie	d. means	saper pronunciare bene un discorso
defoliant operation	operazione di sfrondamento	to have a good d.	distribuzione della corrispondenza
degree , s.	grado	mail d.	demarcare, tracciare una linea di demarcazione
d. of contamination	grado di contaminazione	to demarcate, v.t.	demarcazione, delimitazione
d. of alertness	grado di vigilanza	demarcation , s.	linea di demarcazione
d. of heat	grado di calore	line of d.	smilitarizzazione
d. of latitude	gradi di latitudine	demilitarization , s.	smilitarizzare
d. of security	grado di sicurezza	to demilitarize , v.t.	zona demilitarizzata
d. of humidity	grado di umidità	d. zone	abdicazione, dimissione, rinuncia
d. or risk	grado di rischio	demission , s.	dimettere, dimettersi
deicer , s.	(aer.) dispositivo anti-ghiaccio	to demit , v.t.i.	
dekko , s.	(sl. mil.) sguardo, colpo d'occhio		
to delate , v.t.	denunciare (una persona, un misfatto)		
delay , s.	ritardo, indugio, rinvio		
an hour's d.	un'ora di ritardo		

to d. office	dimettersi dal proprio ufficio	depletion , s.	esaurimento (riserve, forze)
to demob v.t.	smobilitare	to deploy , v.t.i.	spiegare, spiegarsi, schierarsi
demobilization , s.	smobilitazione	deployment , s.	spiegamento (delle forze)
to demobilize , v.t.i.	smobilitare, smobilitarsi	d. area	zona di spiegamento
to demolish , v.t.	demolire, abbattere, distruggere	d. operating base	base di spiegamento
demolition , s.	demolizione	d. stage	fase di spiegamento
atomic d. munition	mina atomica (nucleare)	line of d.	linea di spiegamento
d. belt	zona seminata di esplosivi	to deport , v.t.	deportare, esiliare
charged d. target	obiettivo di demolizione	deportation , s.	deportazione, espulsione
d. equipment	caricato	deportee , s.	deportato
d. firing party	materiale per la demolizione	depot , s.	deposito, magazzino, spaccio
d. guard	gruppo tecnicamente responsabile della demolizione	advanced section of d.	sezione avanzata di magazzino
uncharged d. target	distaccamento per la protezione dei materiali per la demolizione	artillery ammunition d.	deposito munizioni di artiglieria
to charge a d.	obiettivo di demolizione non caricato	central d.	deposito centrale
to demonstrate , v.t.i.	preparare, caricare una demolizione	joint d.	sezione mista di magazzino
demonstration, s.	dimostrare, fare un'azione dimostrativa per ingannare il nemico	main section of d.	sezione principale di magazzino
to demote , v.t.	azione dimostrativa	ordinance and signal mobile d.	parco mobile
demotion , s.	ridurre, far retrocedere ad un grado inferiore	POL d.	deposito carburanti e lubrificanti
denial , s.	retrocessione ad un grado inferiore	small arms ammunition d.	deposito munizioni per armi portatili
d. measure	diniego, rifiuto, rinnegamento	depredation, s.	saccheggio, rapina
self- d.	misure di divieto	depredatory , ag.	caratterizzato da saccheggio, rapina
dent , s.	abnegazione	d. expedition	spedizione a scopo di rapina
the d. in a helmet	ammaccatura, segno di un colpo	depth , s.	profondità
denunciation , s.	le ammaccature su un elmetto	d. contour	linea batimetrica
to deny , v.t.	denuncia (di abuso, di tregua, trattato)	defence in d.	difesa in profondità
to d. access	negare	d. of a column	profondità di una colonna
density , s.	negare l'accesso	d. charge	profondità di una colonna
d. (land mine warfare)	densità	d. finder	bomba antisommersibile
d. altitude	densità di mine	deputy , s.	scandaglio
d. of motor column	densità altitudine	d. Chief of Staff	sostituto, vice
traffic d.	densità di marcia	d. Commander	sottocapo di Stato Maggiore
department , s.	densità di circolazione	d. Chief of Staff operations	vice comandante
d. of the Army	reparto, servizio, sezione, ufficio, dipartimento, ministero, dicastero	d. Chief of Staff Support	sottocapo di Stato Maggiore operazioni
the War D.	dipartimento dell'Esercito (USA)	description , s.	sottocapo di Stato Maggiore logistico
departure , s.	il Ministero della Guerra (USA)	ground d.	descrizione
d. airfield	partenza	personal d.	descrizione del terreno
d. point	zona di decollo	d. of target	connotati personali
estimated time of d.	punto di origine	descriptive , ag.	descrizione di un obiettivo
to deplane , v.i.	ora di partenza prevista	d. name	descrittivo
to deplete , v.t.	scendere da un aereo	derringer , s.	termine descrittivo (cartografia)
	vuotare, esaurire (riserve, forze)	to desert , v.t.i.	pistola a canna corta e di grosso calibro
		deserter , s.	disertare, abbandonare
		desertion , s.	disertore
		designation , s.	diserzione, defezione
		target d.	designazione, indicazione
		to despoil , v.t.	designazione di un obiettivo
			saccheggiare

to **d.** of wounds received in action
Diesel, no. pr.
d. engine
d. oil
d. rail car
to **dig**, v.t.i.
to **d.** oneself in
to **d.** out
digging, s.
d. of emplacements
din s.
the **d.** of war
dingey, **dinghy**, s.
dip, s.
flag at the **d.**
to **dip**, v.t.i.
to **d.** a flag
to **direct**, v.t.i.
the general directed his men to advance
as **d.**
Directing Staff
direct, ag.
d. air support
d. damage assessment
d. fire
d. illumination
d. support
direction, s.
angle of **d.**
d. finder
d. finding
d. of attack
d. of fire
fire **d.**
directive, s.
d. function
to follow **d.**
director, s.
D. General of Army Medical Services
fire **d.**
d. general of Army Veterinary Service
d. gunnery division
d. general of military training
d. general of personnel

morire in seguito a ferite di guerra
diesel
motor diesel
nafta
automotrice diesel
vangare, lavorare la terra, scavare
trincerarsi, scavare
trincee
tirar fuori dalla terra, disseppellire
scavo, sterro
scavo di postazioni
baccano, strepito, fracasso, tumulto
lo strepito della guerra (mar.) lancia
immersione, posizione a mezz'asta di bandiera
bandiera a mezz'asta
immergere, abbassare
abbassare la bandiera in segno di saluto
dirigere, amministrare, dare ordini
il generale ordinò ai suoi uomini di avanzare secondo le istruzioni ricevute
gruppo direttivo, Direzione Esercitazione
diretto, immediato
appoggio aereo diretto
valutazione immediata dei danni
 tiro diretto
illuminazione diretta
appoggio diretto
direzione, amministrazione
angolo di direzione
radiogoniometro
ricerca della direzione, orientamento
direzione di attacco
direzione di tiro
direzione del tiro
direttiva, istruzione, ordine
funzione direttiva
seguire le istruzioni
direttore
Direttore Generale del servizio Sanità dell'esercito
direttore del tiro
Direttore general del servizio veterinario dell'esercito
direttore del reparto fucilieri
direttore generale dell'addestramento militare
direttore generale del personale

d. general of transportation
dirigible, s.
dirk, s.
to **dirk**, v.t.
disability, s.
d. pension
to **disable**, v.t.
a **d.** soldier
disadvantage, s.
to take the enemy at a **d.**
to **disally**, v.t.
to **disanchor**, v.t.
to **disarm**, v.t.
to **d.** a soldier of his rifle
disarmament, s.
disarray, s.
the troops were in **d.**
to **disarray**, v.t.
to **disband**, v.t.i.
the army was **d.**
disbandment, s.
to **disburse**, v.t.
disbursing officer
discharge, s.
d. nozzle
d. from the army
d. for unfitness
to **discharge**, v.t.i.
he **d.** all his duties perfectly
dischargeable, ag.
dischargee, s.
disciplinal, ag.
disciplinary, ag.
d. punishment
discipline, s.
fire **d.**
march **d.**
military **d.**
road **d.**
to enforce perfect **d.**
discretion, s.
to surrender at **d.**
to **discrown**, v.t.

direttore generale dei trasporti
dirigibile, aeronave
pugnale (degli Scozzesi e degli aspiranti di marina)
pugnalare
infermità, invalidità
pensione d'invalidità
mutilare
soldato invalido, mutilato
svantaggio, perdita
cogliere il nemico alla sprovvista, in un momento sfavorevole
sciogliere, rompere un'alleanza
disancorare
disarmare, disarmarsi
togliere il fucile a un soldato
disarmo
disordine, scompiglio
c'era scompiglio tra le truppe
disorganizzare, scompigliare
sbandarsi, essere congelato
l'esercito fu sbandato
dispersione, sbandamento, congedo
sborsare, pagare
ufficiale pagatore
scarica, congedo, riforma, scarica di artiglieria
ugello di scarico
congedo dall'esercito
riforma per inidoneità
riformare, scaricare, congedare, compiere un dovere
egli ha compiuto tutti i suoi doveri perfettamente
congedabile, riformabile
soldato congedato, riformato
disciplinare
chi sa imporre la disciplina
disciplinare
punizione disciplinare
disciplina
disciplina del fuoco
disciplina di marcia
disciplina militare
disciplina stradale
imporre una perfetta disciplina
discrezione, arbitrio, discernimento, libertà di azione
arrendersi a discrezione
detronizzare, deporre

despoiler , s.	saccheggiatore	detainer , s.	detenzione di persona o oggetto, ordine di incarcerazione
despoilment , s.	spoliazione, depredazione	detaiment , s.	detenzione
destination , s.	destinazione	detection , s.	scoperta, rivelazione
d. port	porto di destinazione	radio d. and ranging	radiolocalizzazione
to destroy , v.t.	distruggere, sterminare, demolire	radioactivity d.	rilevamento di radiazioni
destroyer , s.	distruttore, cacciatorpediniere	detector , s.	rivelatore, misuratore
d. escort	cacciatorpediniere di scorta	mine d.	cercamine
guided missile d.	cacciatorpediniere lancia missile	radio d.	rivelatore radio
tank d.	cacciacarri	detention , s.	detenzione, prigionia, arresto
d. tender	nave appoggio per cacciatorpediniere	d. barracks	prigione militare
destruction , s.	distruzione, demolizione, annientamento	d. allowance	indennità giornaliera
d. fire	tiro di demolizione	d. camp	campo di internamento
d. radius	raggio di distruzione	deterrent , s.	deterrente, azione che trattiene, che dissuade
long range d.	distruzione a grande distanza	d. operation	operazione deterrente
mass d. weapon	arma di distruzione di massa	d. patrolling	pattugliamento deterrente
piecemeal d.	distruzione graduale	d. phase	fase deterrente
to detach , v.t.	distaccare	nuclear d.	deterrente nucleare
detached , ag.	distaccato, decentrato, isolato.	to detonate , v.t.i.	detonare, fare esplodere
d. artillery	artiglieria decentrata	detonating , s., ag.	detonante
d. post	posto distaccato	d. cord	cordone detonante
d. unit	reparto distaccato	d. mixture	miscela detonante
detachment , s.	distaccamento	detonation , s.	detonazione, esplosione
on d.	distaccato	detonator , s.	detonatore (di proiettile, bomba)
air photo interpretation d.	distaccamento per l'interpretazione di fotografie aeree	to detrain , v.t.i.	far scendere dal treno (truppe)
delaying d.	distaccamento di contrasto dinamico	to devastate , v.t.	devastare, rovinare
flank d.	distaccamento fiancheggiante	the war d. the whole of Europe	la guerra devastò l'Europa intera
motorized d.	distaccamento motorizzato	devastation , s.	devastazione, rovina
scouting d.	distaccamento di esplorazione	development , s.	sviluppo
d. left in contact	distaccamento lasciato in contatto col nemico	d. plan	piano di sviluppo
security d.	scaglione di sicurezza	deviation , s.	scarto
detail , s.	particolare, dettaglio, piccola azione	device , s.	mezzo, espediente, stratagemma, congegno, dispositivo, meccanismo, (arald.) divisa, emblema, stemma
in d.	dettagliatamente	firing d.	congegno di sparo
war of d.	guerriglia	safety d.	congegno di sicurezza
to detail , v.t.	esporre minuziosamente, distaccare	diagram , s.	diagramma, grafico, schema
to d. the facts	descrivere minutamente i fatti	communication d.	grafico delle trasmissioni
to d. someone for a duty	distaccare qualcuno per un servizio	flight d.	diagramma di volo
detailed , ag.	particolareggiato, dettagliato	radio net d.	grafico delle trasmissioni radio
d. report	rapporto dettagliato	telephone traffic d.	grafico delle trasmissioni telefoniche
to detain , v.t.	trattenere, detenere, custodire	dial , s.	quadrante, scala parlante, rosa dei venti, bussola
to d. the authority	detenere l'autorità	sun d.	meridiana
detainee , s.	confinato	d. sight	cannocchiale panoramico
		to dial , v.t.	comporre un numero telefonico, (rad.) cercare una stazione
		to dictate , v.t.i.	dettare, imporre condizioni
		to d. terms to the enemy	imporre condizioni al nemico
		to die , v.i.	morire

disease , s.	malattia, affezione, morbo, infermità	the enemy fled in d.	il nemico fuggì disordinatamente
endemic d.	malattia endemica	d. spread throughout the country	il disordine si diffuse in tutto il paese
epidemic d.	malattia epidemica	nervous d.	disturbo nervoso
tropical d.	malattia tropicale	disorganization , s.	disorganizzazione
contagious d.	malattia contagiosa	dispatch , s.	invio, spedizione, dispaccio, messaggio
venereal d.	malattia venerea	bulk d.	spedizione di materiali in grande quantità
to disembark, v.t.i.	sbarcare	d. rider	motociclista che porta dispacci
disembarkation, s.	sbarco	mention in d.	citazione all'ordine del giorno
d. port	porto di sbarco	d. box	valigia diplomatica
d. schedule	orario di sbarco	d. case	busta per custodire dispacci, documenti
disembodiment, s.	congedo (di truppe)	to dispatch , v.t.	spedire, inviare, far partire (un corriere, un telegramma)
to disembody, v.t.	congedare (truppe)	to d. a convoy	mettere in moto un convoglio
disengagement, s.	liberazione, svincolamento, sganciamento, disponibilità	dispersion , s.	dispersione, diradamento
disengaging , s.	sganciamento	d. error	scarto di dispersione
d. movement	manovra di sganciamento	d. pattern	schema di dispersione, rosa di tiro
disk , s.	disco	d. plan	piano di diradamento
d. brake	freno a disco	displaced , ag.	rimosso, destituito
d. identity	piastrella d'identità	d. person	profugo, rifugiato politico, deportato
dislocation , s.	dislocazione, dislocamento	displacement , s.	spostamento, dislocamento
d. allowance	indennità di trasferta	to display , v.t.	mostrare, mettere in mostra, esporre, manifestare
to dislodge, v.t.i.	sloggiare (il nemico)	to d. the flag	esporre la bandiera
dislodgement, s.	lo scacciare, sloggiamento	to d. a notice	esporre un avviso
to dismantle, v.t.	smantellare, demolire, spogliare, disarmare	d. controller	controllore responsabile di una dimostrazione aerea
dismantlement , s.	smantellamento, demolizione, disarmo	disposal , s.	disposizione, collocamento (di truppe)
to dismast, v.t.	disalberare (una nave)	bomb d. unit	gruppo addetto al disinnescamento delle bombe
to dismember, v.t.	smembrare	to dispose , v.t.i.	disporre, combinare, distribuire, mettere in ordine
dismemberment, s.	smembramento	the commander d. his troops very well	il comandante distribuì le sue truppe molto bene
dismiss, s.	segnale di rompere le file, le righe	disposition , s.	disposizione, assestamento, ordine, schieramento (di truppe)
to dismiss, v.t.	congedare, licenziare, destituire, dimettere	to dispute , v.t.i.	disputare, contrastare, contendere
to d. someone from the service	radiare qualcuno dai ranghi	to disrupt , v.t.	disgregare, disarticolare, smembrare (un esercito, un impero, uno stato)
to d. troops	mandare in congedo le truppe	overrunning and d. action	azione dirompente e di disarticolazione
to be d. from the service	essere esonerato dal servizio militare	disruptive , ag.	che smembra, che disorganizza
dismiss!	rompete le file!	d. pattern	sagoma di mascheramento
dismissal, s.	congedo, licenziamento, destituzione, radiazione (da ruolo)	disruption , s.	rottura, spaccatura, smembramento, scisma, separazione
dismissible , ag.	congedabile, licenziabile, che si può destituire		
dismount , s.	discesa (da cavallo, da mezzo corazzato)		
to dismount, v.t.i.	scendere, smontare, appiedare		
to d. the cavalry	appiedare la cavalleria		
to d. a gun	smontare, rendere inseribile un cannone		
dismounted , ag.	appiedato		
d. cavalry	cavalleria appiedata		
dismounting , s.	discesa da cavallo, smontaggio (di una macchina)		
to disobey, v.t.	disubbidire, trasgredire		
to d. an order	disubbidire un ordine		
to d. the law	trasgredire la legge		
disorder, s.	disordine, confusione		

to disseminate , v.t.	diffondere, divulgare	d. rapid reaction force	gruppo di divisione pronto ad una rapida reazione
dissemination , s.	diffusione, divulgazione	d. restructuring study	studio per la riorganizzazione della divisione
intelligence d.	diffusione di informazioni	divisional , ag.	di divisione, divisionale
distance , s.	distanza	d. artillery	artiglieria di divisione
buffer d.	marginale di sicurezza	d. rest	turno di riposo nelle retrovie di una divisione
minimum safe d.	distanza di sicurezza nucleare	d. quartermaster	commissario di divisione
nuclear buffer d.	marginale di sicurezza nucleare	d. ordinance officer	ufficiale di divisione addetto ai materiali
total stopping d. of a vehicle	spazio di frenata	d. headquarters	quartier generale di divisione
vehicle d.	distanza interveicolare	d. signals	segnali divisionali
distinctive , ag.	distintivo, atto a distinguere, caratteristico	dixy , s.	(sl. mil.) pentola di ferro
d. number	numero di identificazione	dock , s.	bacino, molo, porto
distress , s.	pericolo, difficoltà	to docket , v.t.	classificare carte, documenti
ship in d.	nave in pericolo	dockyard , s.	arsenale, cantiere
d. call	S.O.S., segnale di soccorso	naval d.	porto militare
d. signal	S.O.S., segnale di soccorso, di pericolo	doctrine , s.	dottrina, teoria
d. gun	cannone per chiamare soccorso	tactical d.	dottrina tattica
d. rocket	razzo per chiamare soccorso	document , s.	documento
distribution , s.	distribuzione	captured d.	documento catturato al nemico
d. list	elenco di distribuzione	classified d.	documento classificato
d. point	centro di distribuzione	confidential d.	documento riservato
fire d.	distribuzione del fuoco	documentation , s.	documentazione
district , s.	distretto, (mar.) dipartimento	d. office	ufficio di documentazione
disturbance , s.	disordine, disturbo	military geographic d.	documentazione geografica militare
civil d.	disordine civile	to dodge , v.t.i.	scartare, scansare, scansarsi, deviare
mental d.	disturbo mentale	to d. military service	farsi riformare
ditch , s.	fossato, trincea	dog-fight , s.	combattimento accanito (generalmente tra caccia)
antitank d.	fosso anticarro	dolman , s.	dolman (cappa da ufficiale)
dive , s.	tuffo, immersione, picchiata	domestic , ag.	domestico
d. bomber	bombardiere in picchiata	d. war	guerra intestina
d. bombing	bombardamento in picchiata	dominance , s.	predominio
d. brakes	deflettori di picchiata	to dominate , v.t.i.	dominare, prevalere
to dive , v.t.	tuffarsi, immergersi, lanciarsi in picchiata	to d. over a people	dominare un popolo
diver , s.	tuffatore, palombaro, veivolo in picchiata	dominator , s.	dominatore
diversion , s.	diversione, deviazione (di strada)	dominion , s.	dominio, impero, ascendente, autorità
diversionary , ag.	diversivo, sussidiario	dope , s.	materiale assorbente per esplosivi
d. attack	attacco diversivo, sussidiario	dormitory , s.	dormitorio, camerata
d. landing	sbarco di diversione	dormant , ag.	inattivo (di mina)
diving , s.	il tuffarsi, tuffo, immersione, picchiata	dose , s.	dose
d. helmet	casco da palombaro	absorbed radiation d.	dose di radiazione assorbita
d. suit	scafandro	exposure d.	dose di esposizione
division , s.	divisione, reparto, sezione	lethal d.	dose letale
airborne d.	divisione aviotrasportata	maximum permissible d.	dose massima accettabile
armoured d.	divisione corazzata	medium lethal d.	dose letale media
infantry d.	divisione di fanteria	radiation d.	dose di radiazione
mechanized d.	divisione meccanizzata	radiation d. rate	intensità di dose radioattiva
motorized d.	divisione motorizzata	reference d.	dose di riferimento
triangular d.	divisione ternaria	dosimeter , s.	dosimetro
d. rear area	retroguardia di divisione	individual d.	dosimetro individuale

tactical reading **d.**

dosimetry, s.

residual **d.**

dossier, s.

target **d.**

to **double**, v.t.i.

d.-battered

d.-breasted

d.-march

d.-march!

d.-quick

d.-cross

to **d.-cross**, v.t.

to **down**, v.t.

down, av.

to shoot **d.** an aircraft

motion **d.** for to-day

downcome, s.

the **d.** of the army after the war

downfall, s.

the **d.** of the empire

to **downgrade**, v.t.

draft, s.

to **draft**, v.t.

draftee, s.

drafter, s.

draftsman, s.

drag, s.

d. boat

to **drag**, v.t.i.

dragon, s.

dragoon, s.

draught, V. **draft**

to **draw**, v.t.i.

to **d.** one's sword

to **d.** rations

drawback, s.

the fog was a **d.** for the advancement of the troops

drawbridge, s.

dreadnought, s.

dosimetro a lettura diretta

dosimetria

dosimetria della radiazione residua

dossier, incartamento, compendio

compendio degli obiettivi

doppiare, raddoppiare, marciare a passo di carica

a doppia canna

a doppio petto (di giacca)

passo di corsa

di corsa!

a passo di carica

doppio giuoco

(sl.) fare il doppio giuoco,

ingannare

abbattere, buttare a terra

giù

abbattere un aereo

mozione portata all'ordine del giorno

sfacelo, disastro

lo sfacelo dell'esercito

dopo la guerra

caduta, rovina, distruzione

la caduta dell'impero

abbassare la classifica di

segretezza

bozza, schema, progetto,

distaccamento, contingente,

membro di un distaccamento,

membro di un contingente,

leva, co-

scrizione

abbozzare, stendere la prima

copia, redigere, distaccare

(truppe)

militare di leva

chi stende (documento),

chi abbozza (progetti),

redattore

disegnatore (di progetti)

(aer.) resistenza aerodinamica

battello

draga

dragare, rastrellare, net-

tare (fiume, porto)

trattore

dragone

tirare, trarre, estrarre

sguainare la spada

ritirare le razioni

inconveniente, svantaggio,

ostacolo

la nebbia era un ostacolo

all'avanzamento delle

truppe

ponte levatoio

(mar.) "dreadnought", co-

razzata, giaccone di pesante

lana impermeabiliz-

zata

dredge, s.

d. boat

floating **d.**

to **dredge**, v.t.i.

dredger, s.

mine **d.**

to **dress**, v.t.i.

d. regulations

to **d.** a ship

to **d.** a wound

dressing, s.

drift, s.

d. angle

d. ice

to **drift**, v.t.i.

drifting mine

driftage, s.

drifter, s.

drill, s.

d. ammunition

d. cartridge

d. ground

d. mine

d. purpose only

d. regulations

d. sergeant

close order **d.**

d. instructor

to **drill**, v.t.

drilling, s.

d. ring

to **drive**, v.t.i.

to **d.** out

to **d.** the enemy out

driver, s.

truck **d.**

dremong, s.

drone, s.

drop, s.

air **d.**

d. altitude

d. height

draga

galleggiante per dragare

draga galleggiante

dragare, scavare con la

draga

draga, battello usato per

dragare

dragamine

vestire, medicare, decora-

re, allinearsi, allineare (le

file)

regolamenti riguardo

l'uniforme

pavesare una nave

medicare una ferita

allineamento

deriva, movimento progres-

sivo, velocità (di corrente)

angolo di deriva

ghiaccio alla deriva

andare alla deriva, lasciar-

si trasportare

mina alla deriva

l'andare alla deriva, deri-

va, deviazione (dalla rotta)

motopeschereccio, dra-

gamine

esercitazione, addestra-

mento, esercizio, istruzione

munizionamento da eser-

citazione

cartuccia da eser-

citazione

campo da esercitazioni,

piazza d'armi

mina finta da esercitazione

solo a fini di esercitazione

regolamenti per l'esercita-

zione

sergente istruttore

ordine serrato

istruttore dell'esercitazione

esercitare, addestrare,

fare esercitazioni

esercitazione

sonda

andare in veicolo, guida-

re, portare (in veicolo)

cacciare fuori

scacciare il nemico

autista, conduttore di au-

tomezzi

conduttore di autocarri

(st.) dromone (veloce nave

da guerra)

veicolo di terra, mare, aria

senza pilota (teleguidato)

caduta, salto, lancio col

paracadute

aviolancio

altitudine di lancio (col

paracadute)

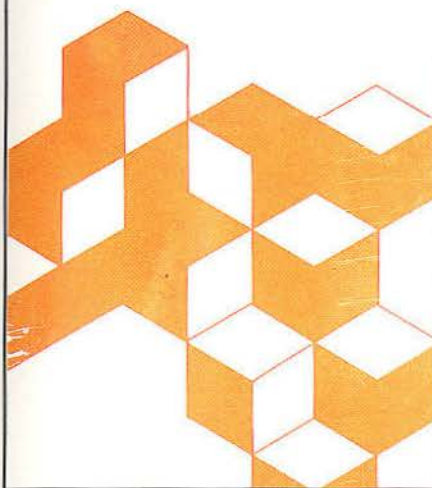
quota di lancio

d. master	direttore di lancio (materiali)	dugout, s.	canoa (ricavata da un tronco d'albero), rifugio, ricovero sotterraneo, trincea coperta, (sl. mil.) ufficiale in pensione richiamato
d. message	messaggio lanciato da un velivolo	dumdum, s.	pallottola esplosiva
d. zone	zona di lancio	dummy, ag.	falso, finto, simulato; s. fantoccio, sagoma
free d.	lancio a caduta libera	d. bomber	sagoma di bombardiere
parachute d.	lancio con paracadute	d. cartridge	cartuccia a salve
supply d.	lancio di rifornimenti	d. message	messaggio fittizio
to droop, v.t.i.	abbassare	d. minfield	campo di mine fittizio
to d. the colours	salutare abbassando la bandiera	d. position	posizione simulata
to drop, v.t.i.	sganciare bombe da un aereo	dump, s.	deposito di munizioni, scarico di materiali alla rinfusa, deposito temporaneo al fronte
drop!	comando "accorciare il tiro!"	artillery ammunition d.	deposito munizioni di artiglieria
drum, s.	tamburo, bidone, fusto di combustibile	d. truck	autocarro con cassone ribaltabile
d. major	tamburo maggiore	small arms ammunition d.	deposito munizioni per armi portatili
to drum, v.t.i.	suonare il tamburo	dumper, s.	autoribaltabile
drumfire, s.	fuoco tambureggiante di sbarramento	to dump, v.t.	scaricare (macerie, detriti), formare una riserva, un deposito (di viveri, munizioni)
drumhead, s.	pelle di tamburo	dungeon, s.	cella, prigione sotterranea
d. court-martial	corte marziale (all'aperto)	Dunkerque, Dunkirk, no. pr.	(fig.) Dunkerque ritirata sotto bombardamento nemico
drummer, s.	tamburino, suonatore di tamburo	duration, s.	durata
dry, ag.	secco, asciutto, arido, a salve, senza munizioni	d. of movement	durata del movimento
d. battery	batteria a secco	duress, s.	prigionia, arresto, costrizione, violenza
d. dock	bacino di carenaggio	to act under d.	cedere alla forza
d. gap bridge	ponte lanciato sopra una breccia secca (cratere, fossati anticarro)	dust, s.	polvere
dual, ag.	doppio, duplice	radioactive d.	polvere radioattiva
d. purpose manoeuvring unit	unità di manovra a duplice scopo	duty, s.	ubbidienza, rispetto, dovere, funzione, mansione, servizio, imposta, tassa
to dub, v.t.	(arc.) nominare, creare (cavaliere)	d. free	esente da imposta
to d. someone a knight	nominare qualcuno cavaliere	d. corporal	caporale di giornata
duck, s.	veicolo anfibia	d. officer	ufficiale di servizio
dud, s.	proiettile, bomba, razzo inesploso	d. paid	franco dogana
due, ag.	dovuto, atteso, programmato	soldierly d.	dovere militare
the ship is d. tomorrow	la nave è attesa per domani	temporary d.	servizio isolato, in foglio di viaggio
the drill is d. tomorrow	l'esercitazione è programmata per domani	to be on d.	essere di servizio
due, s.	il dovuto, il debito, il giusto, tributo, pl. quota sociale (da pagarsi ad un circolo)	to come off d.	smontare di servizio
annual d.	quote annuali	to fulfill one's d.	compiere il proprio dovere
duel, s.	duello	the commander told the soldier what his d. were	il comandante disse al soldato quali erano le sue incombenze
to fight a d.	battersi a duello	dynamitard, s.	dinamitardo
to duel, v.i.	fare un duello, battersi a duello	dynamite, s.	dinamite
dueller, s.	duellante	to dynamite, v.t.	far saltare con la dinamite
duelling, s.	il duellare	dynamiter, s.	dinamitardo
duellist, s.	duellante		



CARLO MARIA SANTORO
L'ITALIA E
IL MEDITERRANEO
QUESTIONI DI POLITICA ESTERA

CENTRO STUDI E RICERCHE DI POLITICA COMPARATA
UNIVERSITÀ "L. BOCCIONI"
FRANCO ANGELI



Carlo Maria Santoro: "L'Italia e il Mediterraneo. Questioni di politica estera",

("Italy and the Mediterranean. Matters of foreign policy"), Franco Angeli, Milan, 1988, pages 233, L. 22,000

The general aspects of Italian foreign policy, and in particular the Mediterranean and Middle-Eastern, and the change of the Italian political picture during the '80s, are the subject of the author's analysis. The volume contains eight essays and studies on this subject.

These are the results of research and studies carried out by some Italian universities in collaboration with the Ministry of Foreign Affairs and coordinated by the University of Bologna.

The reasons for the "revival" of the Italian foreign policy and the following change of the international picture of Italy are analyzed and formulated in a series of interpretative hypotheses.

These hypotheses are based on the quantification of four "external" and "internal" independent variables, among which the redistribution of roles between the hegemonic ally — the United States — and the minor partners of the Alliance, and the increased Italian vulnerability to any possi-

ble external menace, as shown by the Libyan missiles against Lampedusa.

Italy that for its strategic position, has always acted as "bridge" between two worlds — the European and the Arabian North-African —, and that weaved a net of political and economic links in the Mediterranean area, found itself being the most vulnerable country of the Atlantic Alliance and, above all, according to Handel's classification, started playing the role of "medium power" in comparison with the "sub-system" of the East-West blocs.

The military initiatives Italy was involved in during the last few years are only one of the aspects of the national foreign policy within its new role.

But how can the Italian foreign policy expand and, at the same time, improve and adapt itself, in particular in the Mediterranean area, "a place geographically non-homogeneous, made up by different sub-regional areas where trims and unexpected volte-faces are very common?"

Which are the bonds of the new policy and through which instruments of reforms will it be able to meet future needs?

In this connection very important is the preparation and the role played by the Italian

40 YEARS EXPERIENCE



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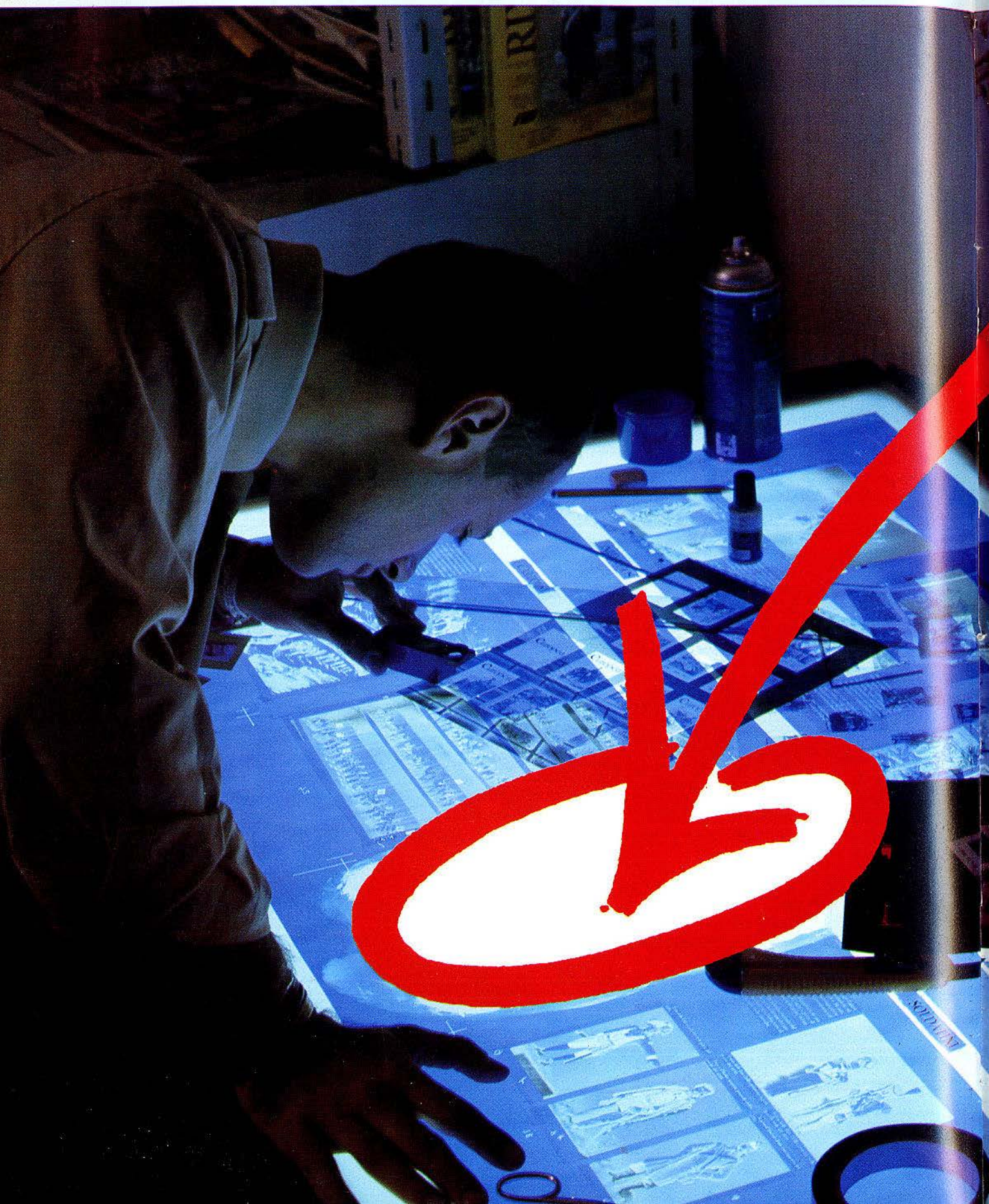


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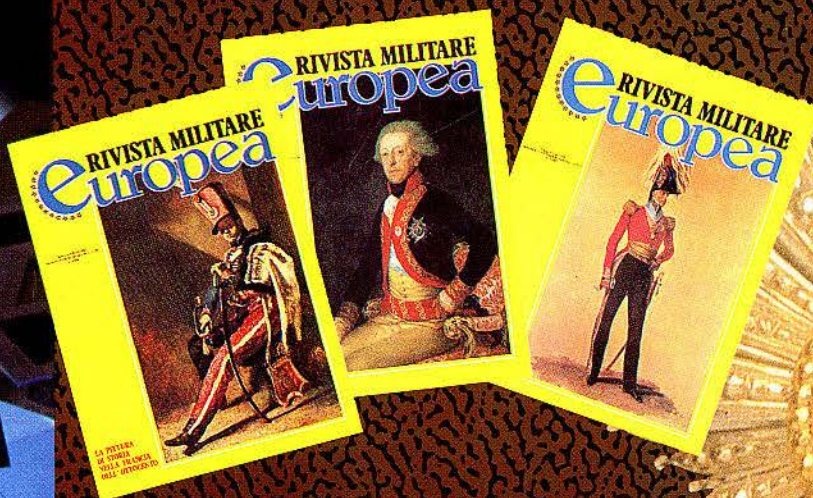
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diplomats, above all as decision makers, in order to avoid for the Italian foreign policy, worn away by intergovernmental conflicts, to be established, above all in the Mediterranean area, according to four different political lines.

Antonio Liuzzi



The Italian Army in the Great War (1915-1918) vol. V - tome II: "The events from July 1918 to the start of the Peace Conference", Rome 1988.

The History Office of the Army General Staff has recently published the last volume of the Official Report on the operations of the Italian Army in World War I, started in 1927. On the occasion of the 70th Anniversary of the Vittorio Veneto battle and thanks to the pluriennial commitment of its author, General Alberto Rovighi, former teacher of Military History at the War training School in Civitavecchia, this volume completes the well-documented exposition of the big effort made by the Italian Nation and by its Army in those years. Also this tome, like the previous ones, is made up by three books: Text, Documents and Enclosure, Maps.

The text is divided into three parts. The first is dedicated to the situation and events of the summertime, following the successful defensive battle on the Mount Grappa and on the Piave. After the description of the

general situation, and above all of the Italian and enemy ones, it closely examines the various reasons that stopped our Supreme Command from taking offensive initiatives. While the combat activity came to a standstill, a deep qualitative strengthening of our Army took place, in sight of the final effort, fixed among the allied Countries for the Spring of 1919.

The second part is dedicated to the Vittorio Veneto battle and closely examines the events and reasons that led to take such an important initiative, in an already late season, according to methods and in sectors different from those previously established. So it considers: genesis and evolution of the plans of the Supreme Command, organizing aspects, opposing forces. The examination of the events is preceded by their synthesis, that also represents the reason of the rather unusual division of the battle into four phases, and that for 14 days, saw all units of our Army fighting on a 340 kilometer long front and engaged in complex operations of breaking, penetration, completion and utilization of the success achieved. After examining closely some historically controversial aspects of the armistice negotiations, this part ends with some political and military comments concerning the battle.

The third part is dedicated to a generally overlooked period, during which our Units were not engaged in fighting, but that saw a big reorganization of our Army (Command, staff, operative and logistic structures).

The period from November 5th, 1918 to January 18th, 1919 (starting of the Peace Conference) saw our Units engaged: in the execution of the armistice clauses; in the advance and occupation of the freed territories as far as the Alpine ridge while the logistic apparatus was still West of the Piave; in administrative, political and economic interventions in favour of the population; in the effort to put the carriage and railway communications back in operation and to restore acceptable life conditions in a large area; in political-administrative interventions in those areas inhabited by populations speaking a different language.

All this took place while the demobilization was starting and the Country was naturally reducing its previous engagement and was affected by the first difficulties: political difficulties concerning the post-war international and economic order because of the standstill.

One of the last chapters of the Report, contains some political and military comments about many, sometimes controversial, aspects of the activity of our Army and its soldiers during the war; about the efforts made to win; about the meaning of this vic-

tory at that time, but also nowadays.

669 documents enclosed and the reproduction of 47 maps and panoramic views of that time, enrich a work that the Chief of the Army General Staff was glad to present officially to the President of the Republic last 27 October, on the occasion of this 70th Anniversary, and that the Historical Office is very pleased to present to the Country.



Mario Rizza: "I nostri battaglioni alpini", ("Our Alpine battalions"), Manfrini, Calliano (TN), 1987, pages 190.

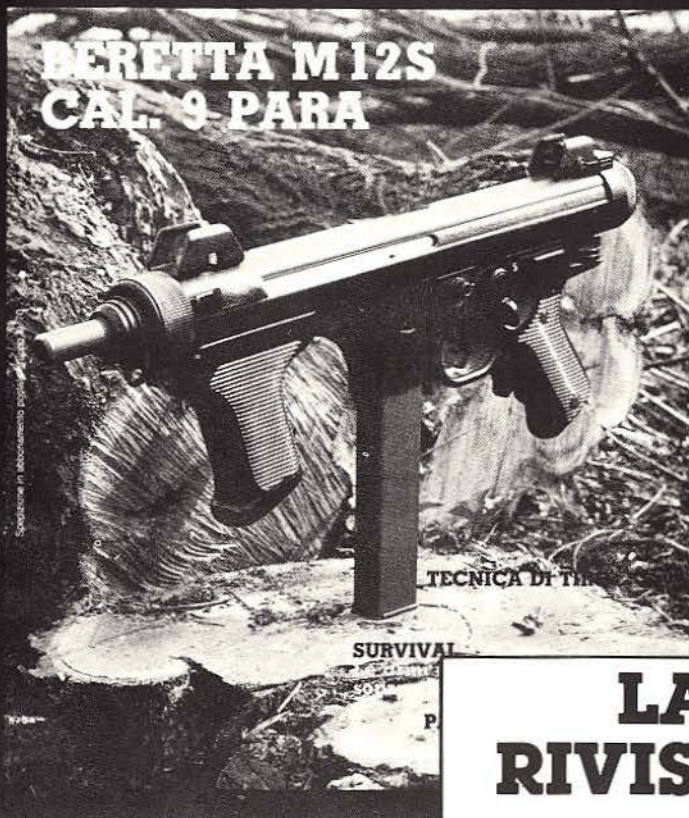
The Alpine marshal Mario Rizza, lover of military history, recalls, through this book, the events of all Alpine battalions, from 1882, having the name of a mount, town or valley.

This work issued on the occasion of the 60th National Gathering of the Alpine Troops in Trento, is a valid support to the knowledge of these troops and will contribute to vulgarize the story of the still existing battalions and of those dissolved.

The Author intends to supply the readers a schematic picture of all Alpine units summarizing the most important and meaningful episodes.

For each unit he describes the decorations awarded to the War Flag and the individual ones.

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DISARMAMENT WITHIN SECURITY

by Giulio Andreotti

The Moscow Summit between the United States and the Soviet Union, despite the results obtained and those which preceded it, confirms that the two major powers are engaged in uninterrupted negotiations in which the point of arrival, in the field of armaments just as in any other field, justifies the most ambitious expectations.

I do not believe that the results achieved so far — unthought of only a couple of years ago — may be considered acquired for ever; indeed, I think that if they have to be improved and consolidated they require a particularly suitable psychological climate between the parts and, lastly, the present diffidence must be gradually replaced by mutual trust,



which is formed, above all, by actual facts and initiatives supported by political willingness and coherent behaviours.

The overwhelming majority which accompanied the Senate of the United States' approval of the agreement on euromissiles proves how much the American Nation is engaged in this effort for peace.

The Soviet Union too has made basic choices bound to plans designed to transform their society and to the substantial revision of their outlook towards international relations. It is an important turning point which must be encouraged and which has an absolute need for external supports if domestic counterblows liable to block the renewal process are to be avoided.

These results are rewarding for countries which, like Italy, within the Atlantic Alliance and together with its community partners, have insisted through all these years that Europe should employ all its weight and prestige to maintain the dialogue open even when the conflict between East and West was most bitter.

Of course not all the fruit of such an intense negotiation ripens at the same time. We had hoped that negotiations between the United States of America and the Soviet Union on the 50% reduction of offensive strategic weapons would also end with the Moscow Summit. This was not so and we are sorry for it: the positive point, however, is that the two countries confirmed their willingness to give a clean cut to the most dangerous weapons.

Nowadays, in many parts of the world, violence and war are arbiters of politics. Negotiations, however, seem the sole means of putting a stop to everlasting conflicts. Thanks to the United Nations' untiring effort we have seen the results in Afghanistan, and also in other areas where there are open conflicts in which foreign forces interfere. Here we can now glimpse possible solutions; in Angola and Cambodia, for example. The two major powers look onto regional conflicts in terms of a possible, though yet uncertain, cooperation and no longer as a confrontation. In reducing the area of employment of the forces, this policy actually works in favour of the reduction of armaments.

A further element is the re-

examination — fully successful — of the **Non Proliferation Treaty**.

At that time, Italy had accepted the limitations set down by this Treaty as it considered it the starting point both to stop the widespread of nuclear weapons and to reduce the arsenals of those who already have these weapons: an aim, the latter, which concerns the two major powers, but also all the other countries responsible for military balance. For the first time, thanks to the agreements between the United States of America and the Soviet Union regarding intermediate weapons and, above all, thanks to negotiations underway for a drastic reduction of strategic weapons, there is an inversion of trend which makes the adhesion to the Non Proliferation Treaty even more justifiable. We hope that this evolution may favour a further increase in the number of Countries which willingly relinquish their own nuclear deterrent. In this respect Saudi Arabia's decision seems very significant.

In the light of the above, this seems a favourable time to give a strong drive to the objectives of disarmament, security and peace.

As the dialogue between the two major powers, supported, as in the case of the agreement on intermediate weapons, by the cooperation of the respective allied Countries, has given important results, the time has come, for the sake of equilibrium, to give a more dynamic trend to multilateral negotiations. This, according to me, is one of the musts to be emphasized to avoid, in

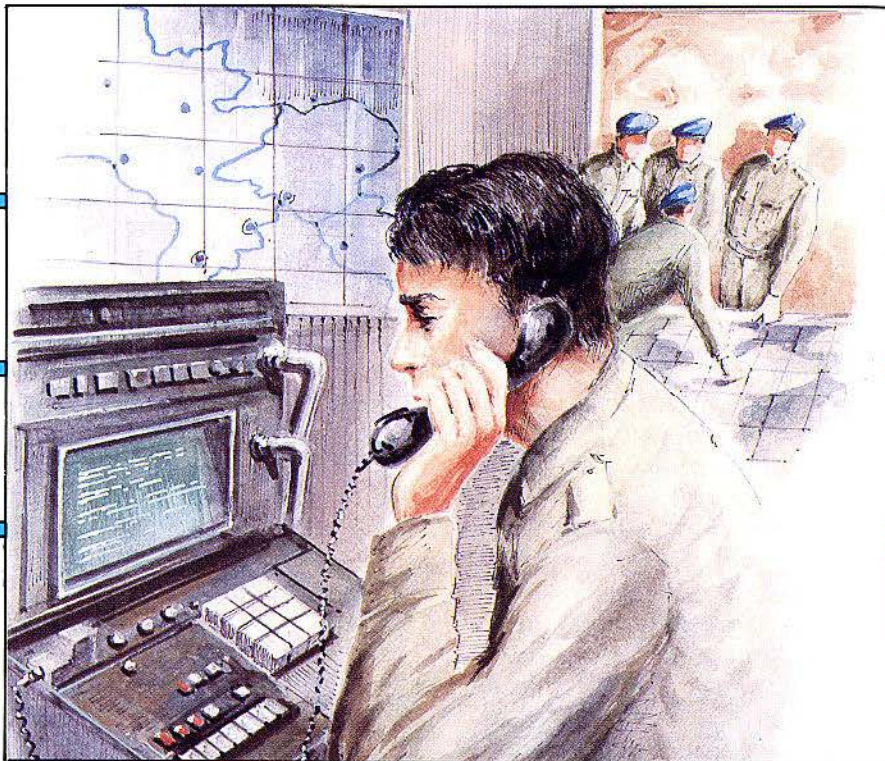


multilateral disarmament, a standstill which would go against the present dynamism of the international situation.

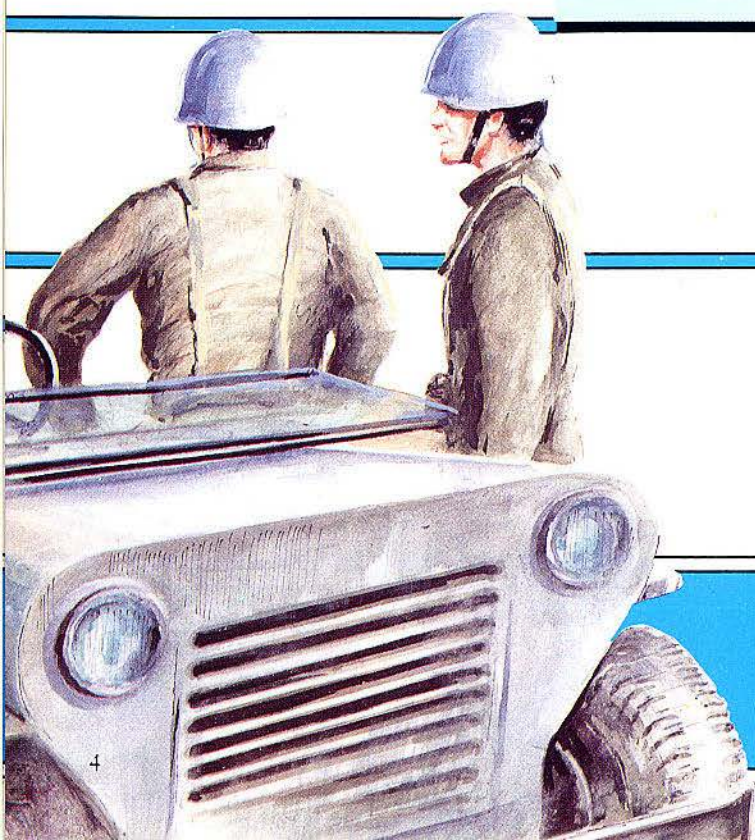
In seeking a more rational and efficient role for our Organization, we have to maintain the appropriate distinctions between the areas of competence and the different vocations such as the universality of the General Assembly and its deliberative Bodies on the one side and face the most restricted negotiating competence of the Disarmament Conference on the other.

It seems more difficult to think of the Security Council in matters of armament control. The Security Council, however, will have to continue to operate to prevent the use of strength and favour the development of a political climate steadier and thus more appropriate for the reduction of armaments.

I am thinking of the importance of the Security Council's role in the solution of regional tensions, through the good offices of the Secretary General too, tensions that foster the race for armaments and increase the flow of military expenditure. Here, all the experience of the United Nations and above all that of the last years, confirms how



The results achieved so far, to be consolidated and improved, require mutual trust made of actual facts or specific initiatives supported by political willingness and coherent behaviours.



essential it is to maintain the unity of the Council and of its standing members.

The societarian framework of Geneva has for years, too many perhaps, been the ground on which to negotiate for a global ban of chemical weapons; but, despite the universal general repulsion for this kind of armament, the desired objective is still far off. We believe that the ban of chemical weapons must imply the rapid destruction of all arsenals and, above all, of the bigger ones and an immediate discontinuance of their production, within a severe verification regime.

Aware of the difficulties involved in the verifications, on 19 and 20 May, 1988 we promoted in Rome an international Seminar of scientists on the subject. Following the suggestions of these scientists regarding the actual execution of experimentation designed to establish severe regulations for the inspections, we intend inviting an international group of specialists to visit a chemical plant in Italy in order to further examine the problems regarding controls on the non production.

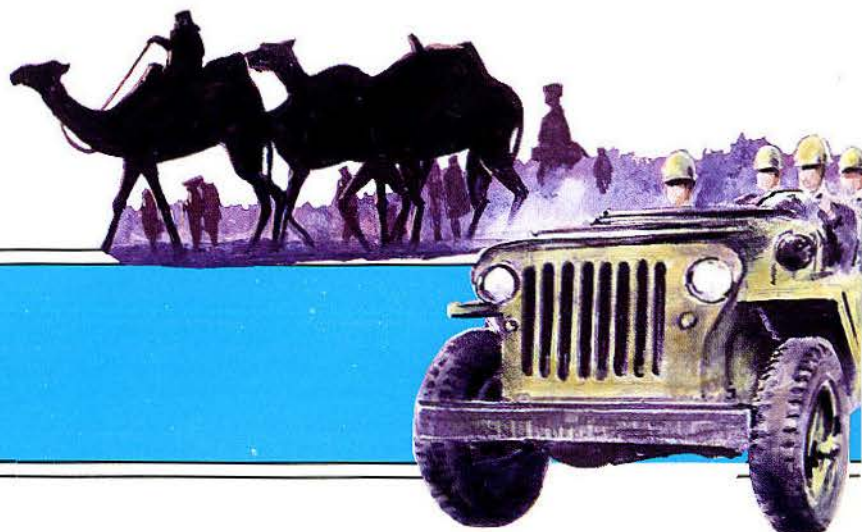
We are also willing to sustain a detailed exchange of short term information, the methods of which are still to be agreed upon; we are also open to severe measures of control on the export of chemical substances which may be used for military purposes. Such measures were adopted in the recent past to hinder the proliferation of the above.

The objective remains an international convention joined by all the States. We hope that personal interests of a political and economic nature will not prevent a rapid ban of these weapons which, as we have seen, are still employed in conflicts at present underway and risk being employed in the future, despite their devastating effects.

We should also assist in favouring a redimensioning of conventional weapons towards the bottom levels. The toll of the about one hundred and forty conventional conflicts of the post war period may



In Europe conventional imbalances cause a steady situation of uneasiness, foster mutual distrust and absorb immense resources.



be reckoned in about 20 million victims.

In Europe, conventional imbalances cause a constant situation of uneasiness, foster mutual distrust and absorb immense resources. Here too there are symptoms that something new is taking place and we hope that this will be confirmed in the coming months. We intend to test the willingness of the countries concerned to eliminate existing imbalances in their own favour through adequate negotial corrections towards the lower levels and not through the increase of the Western Countries' military potential.

Within the negotiations started in Vienna among members of the two alliances we will be able to tackle the problem at its roots, without ig-

noring the positive effects of a solution within what is still the most important regional opposition, as an example for situations of open or latent tension in other areas of the world.

In the past ten years, the Italian Government has been promoting measures of control and limitations to the trade of conventional weapons. I realize this is a difficult subject and this is not the first time we face it. Nonetheless we intend to examine it, encouraged by the increasing expectations of international public opinion, in developed countries as well as in those of the third world, for a complete transparency in this respect.

We have promoted a discipline with the European Community and we would like to see it discussed also by the United Nations.

No aspect of armament control seems more delicate and, at the same time, promising than the one regarding inspections. This problem is both political and technical; political inasmuch as the verification cannot be separated from a certain degree of trust and, therefore, is based on

the general atmosphere of mutual relations; it is also a technical problem, however, with rather serious difficulties due to the complexity of the agreed armament destruction.

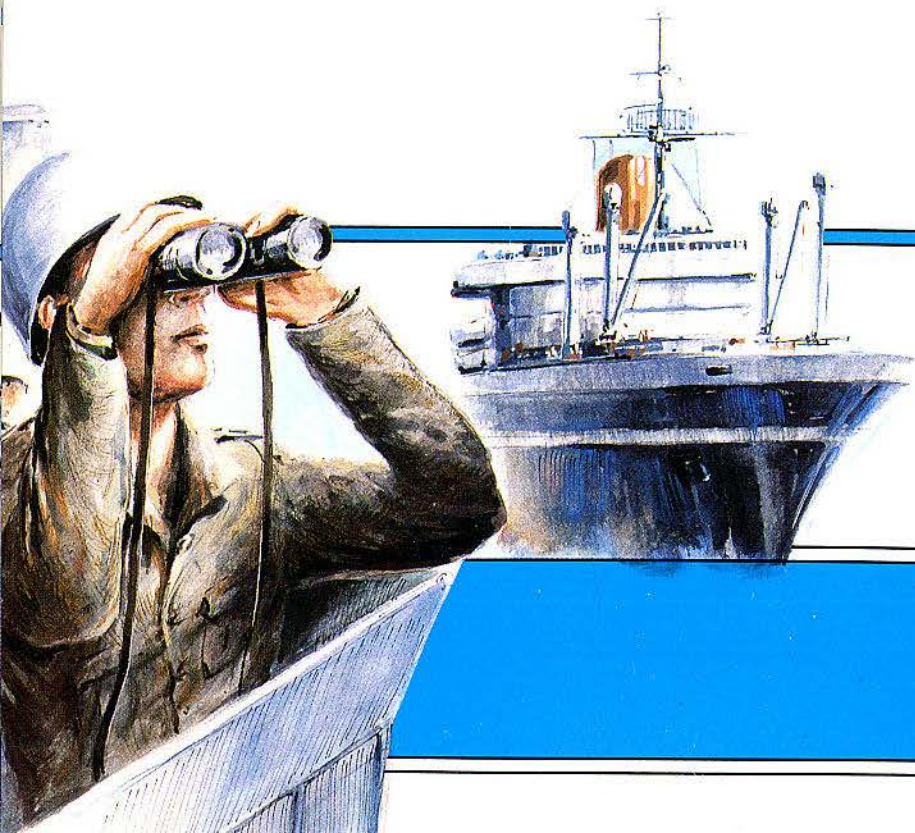
We believe that verifications might become the ground for always greater convergencies. In Moscow a joint procedure of control of nuclear experiments has been codified. This could lead to a gradual reduction of their number and entity so that also this aspect of security may be subject to quantity limitations.

The principle of a joint control, at the very origins of the process of creation of nuclear weapons, is, according to me, full of implications and of possible further developments. With the support of science on both sides, it increases the transparency of the respective apparatuses. Nothing is more dangerous, in the nuclear age, than a condition of permanent uncertainty.

We would like the United Nations to be more involved in the issue of verifications. In sum, it is a matter of pursuing a flexible and realistic approach which, though not interfering in the negotial processes underway, aims at allowing a greater involvement of the States in the process of verification.

According to positions taken up in the past, Italy favours the elaboration of principles regarding verification — under the protection of the United Nations — also on the basis of already acquired experiences of some Countries. It also favours the promotion of an analysis of the modalities through which the United Nations may supply a specific support and facilitate the spotting out of very advanced techniques and suitable mechanisms as regards multilateral disarmament. The objective should be that of giving a technical base from which everyone may draw for the sake of a greater reliability.

As regards multilateral controls we have accumulated useful experiences such as for example the peaceful use of nuclear energy through the IAEA (International Atomic Energy Agen-



cy). I wonder if we cannot draw from this experience to establish, for example, a body of experts designed to investigate on the alleged employment of chemical and biological weapons.

One of the most salient issues is the prevention of the armament race in space. The Italian Government believes, that within a global and complete disarmament, space should be destined to peaceful activities and that the use and exploration of space should contribute to the welfare of everyone and, indeed, increase the sense of community among the States.

The two major powers are fully aware that an uncontrolled competition in the deployment of weapons in space would end up by being extremely expensive without further increasing our security. On this point too the United States and the Soviet Union believe they will be able to reach an agreement capable of conciliating the former's freedom of research and the latter's mistrust. We hope that all kind of research and activity will be carried out freely and that the principles and objectives stated by the United Nations Charter will be extended to space. The last proposal in this respect should be considered carefully; that is the peaceful joint expedition of the United States and the Soviet Union to the planet named after the Roman God of War.

On this point the works of the Geneva Disarmament Conference are still in the initial stage. We would like the Geneva Conference to progress with more incisiveness, despite the undeniable difficulties relating to politics, strategy and technology. Technology, however, can supply better conditions of security to a decreasing level of armaments.

Everything, however, from the joint control of nuclear experiments to space ventures and the analysis of the verification regimes moving, I believe, in the direction of a greater cooperation as regards science.

Science did not create the means



General and complete disarmament remains the ultimate objective, in a framework of stability, transparency and respect of the principles of the United Nations.

of destruction. These were created by politics which directs the means afforded by science towards the wrong objectives and this is the point we have to modify.

Scientists can and must work together and if this international cooperation is achieved, politicians all over the world will be facilitated in their job of building structures of peace at the service of everyone. Science makes the world smaller. We must strengthen the present stage of international detente with the support of the free circulation of men and ideas. This will not only ensure stability in East-West relations but will also start development plans involving emerging Countries.

I have come to the last issue of my report.

Our security is not solely bound to the reduction of armaments, but also to a wider observance of the principles and regulations of the United Nations, including the respect of human rights and a meaningful and broader acknowledgement of their role. Within the United Nations we have debated on the relations existing between disarmament and development and on the economic imbalances which negatively affect international stability.

The United Nations dedicated a specific conference to the re-orientation of resources towards objectives of peace. This is no short term process and, indeed, it requires a change in the international climate both as regards East-West relations and regional balances. The important point, however, according to us, is that the general lines of the problem have been defined and that everyone has been asked to consider general complete disarmament.

General and complete disarmament remains the ultimate objective, in a framework of stability, transparency and respect of the principles of the United Nations: An objective which requires graduality, but which must direct and merge the action of countries having a different social and economic structure and an equally different international

role. We should not serve this cause with general declarations of principles but, as shown by the events of recent years, with a firm negotiation on the gradual reduction of the levels of strength and, in some way, the dismantlement of the psychologic and material structures which have brought us to the present situation.

This goal cannot be achieved

tomorrow, but it gives one of the main impulses for our policy and we will behave accordingly. The chances of history are not scheduled and come unexpectedly and it is the task of politicians to grasp them when they come. Perhaps no generation could, under such circumstances, do more but I also believe that it must not, in every thing, dare less.

For the last ten years the Italian Government has promoted measures of control and limitations to the trade of conventional weapons.

The Security Council will have to continue to work for the prevention of the use of the force and favour the development of a steadier political climate and, thus, favourable to the reduction of armaments.




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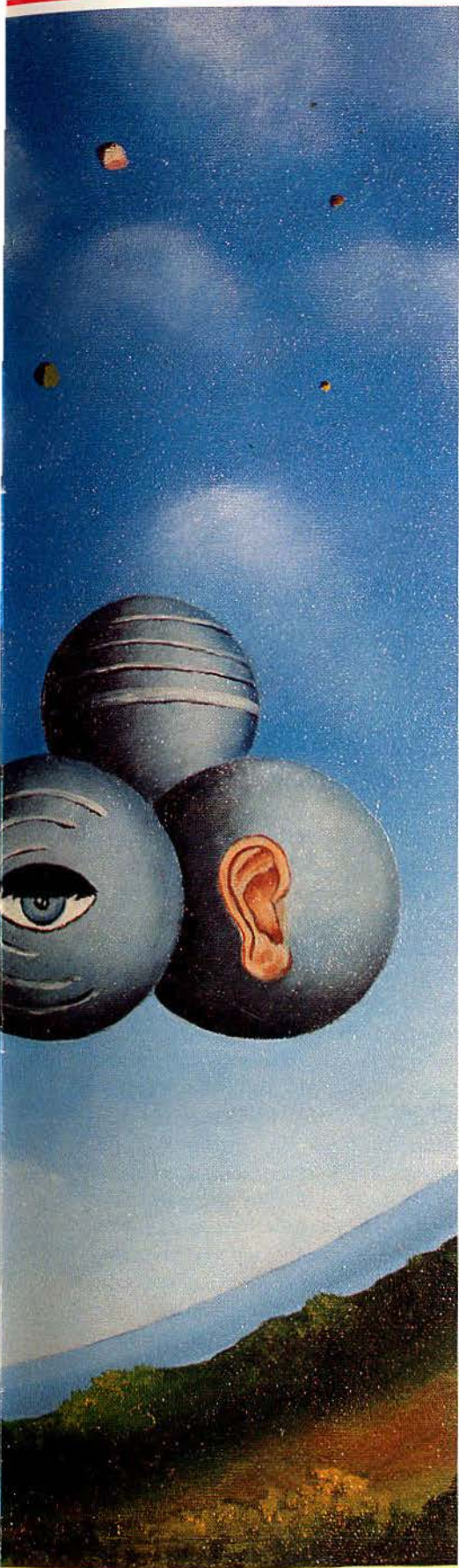
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INDUSTRIAL STRATEGY AND MANAGEMENT IN THE FIELD OF DEFENCE

by Umberto Agnelli





There is a very clear trend towards international cooperation in the field of production for Defence. The Europe of Defence is more likely to arise in facts (as a result of industrial cooperations) than in the Institutions (for which political agreements are required).

It is a matter of an evolution greatly increased by recent events.

The agreements between the United States and the Soviet Union demand a re-consideration of the role of nuclear strategic weapons and increase the attention paid to conventional weapons, especially as regards the so-called "European theatre".

Moreover, the redistribution of expenses for defence within NATO, between Americans and Europeans (better known as **burden sharing**) has probably come to a turning point, inasmuch as the problem had so far remained in the background and was the subject of a rather abstract debate. However, with the new United States Presidency it will become very real, because President Bush will have to intervene to reduce the alarming budget deficit, and the costs of American forces in Europe will be at the centre of the attention. This is an euphemism to say that the above costs will be cut down immediately.

In sum, European countries will have to spend more, and above all, better if they do not wish to be less defended.

This means creating a combined action in all sectors regarding Defence: from the institutional cooperation among governments, ministries and Superior Commands, to the cooperation among operational structures, and the cooperation among industries.

On the institutional side the most

recent and important facts are the following: the entry of Spain and Portugal into the UEO on the one hand and on the other the promising understanding reached — within NATO — at Independent European Program Group (IEPG) level, concerning the promotion of industrial cooperations.

It is premature to state — as many commentators have written — that we are nearing a common European market as regards Defence. It is certain, however, that we are in the right direction, but that it will not be without obstacles and difficulties.

It may seem a paradox, but if we wish to establish a European system of industries for Defence, we must have strong national industries.

More precisely, we have to identify, in the national Defence industry, those sectors which are stronger and admitting of international cooperations on an "equal" base.

Defence is, in fact, a very particular reality: besides being an important economic component it carries out a vital and fundamental function of the State.

Therefore, that which applies to other sectors designed exclusively for the market cannot apply to Defence. The laws of the market also apply to Defence, of course, but as it is a "very special" market they have to be appropriately adapted to its specific characteristics.

A Country wishing to become more international may relinquish its production of stockings and toys, but if it abandons its own Defence industry and the relative research, it undergoes a decrease in autonomy and development and in its capacity to negotiate.

To give life to a European defence industry system it is first of all necessary to have strong national industries.

The national Defence industry must serve the aims of the policy of one's Country.

This is a basic principle which, in itself, does not imply a longing for self-sufficiency, especially because, among Italy's objectives, the creation of an united Europe is prioritarian.

What is now happening in Germany, France and Great Britain is the application of this principle: the action of the governments of these countries is clearly and explicitly designed to strengthen their Defence industry.

This action of support is carried out in different ways. In Germany the government uses the technique of *moral suasion* to guide the industries on their path towards the above objective. This technique is not a kind invitation but a strong pressure carried out in an informal and discreet manner. A proof of this is the recent Daimler Benz-MBB agreement.

In France, instead, as a great number of the Defence industries are owned by the State, the rationalization and merging process is directed by the government itself.

What is happening in Italy? The behaviour of our Armed Forces has proved very responsible and attentive. The latter have always borne in mind, in their purchasing policy, the need to support and strengthen the national industry even by favouring rationalization.

Nowadays, the purchasing policy of the Armed Forces can and must assist the Italian defence industry in becoming more international and in increasing the know how required by development.

Military orders everywhere, in fact, are of the utmost importance for technological development and for the training of technicians who are absolutely necessary for Defence and for the economic system as a whole.

Actually, military men are the true artificers of the industrial policy in the field of Defence.

Nowadays however, restrictions to

the Defence budget and the ensuing need for cheaper supplies and higher quality material, reduce the margin of flexibility in choices. If the Italian industry is incapable of offering the best, in terms of quantity and price, it will be necessary to turn to foreign countries.

Hence the need for choices regarding the national government.

In the past not much attention was paid to the role of the Italian Defence industry as an instrument of support for the Italian foreign policy aimed at finding brokerage and linking roles with Mediterranean countries.

A modern democracy, working for peace and the cooling up of tensions, must be proud of having a strong Defence industry because it allows to achieve exchanges which would otherwise be impossible.

Exchanges which consist in facilitating the attenuation of tensions in return of an offer of security to those countries accepting to proceed in this direction.

Our country lacked the will to follow this policy.

A rather emotional and simple viewpoint has taken the upperhand: the Defence industry produces weapons, weapons are an instrument of death, the Defence industry is evil or, in the best of cases, a reality which is better to conceal.

We have thus made a double mistake:

- that of ignoring the Copernican revolution of the last forty years in which the deterrent role of sophisticated weapons has been seen as the most valid safeguard of peace and detente;
- that of actually following,

Industries owe much to the Armed Forces: we would never have been able to create a modern industry, in Italy or abroad without referring to the military organization pattern, its logistics and strategy.

though without wanting to, the behaviour typical of Countries lacking in democracy and peace objectives because these are the countries which shadow the role of their defence industries. This, however, is only to conceal other aims.

There is no point, however, in recriminating over the past. Nowadays, while hoping that foreign policy will shortly become a European foreign policy, we must aim at the strengthening in quality of the Armed Forces and of the Defence industry if we wish to give our contribution.

An important contribution is coming from organizations such as the Defence-Industry Committee established in these last years to create a direct relationship among Armed Forces, government structures and industry. It is a very useful and important step forward which, however, still remains at a technical level.

What we still do not see is the achievement of a wider political sensitiveness as, for instance, in France or Great Britain.

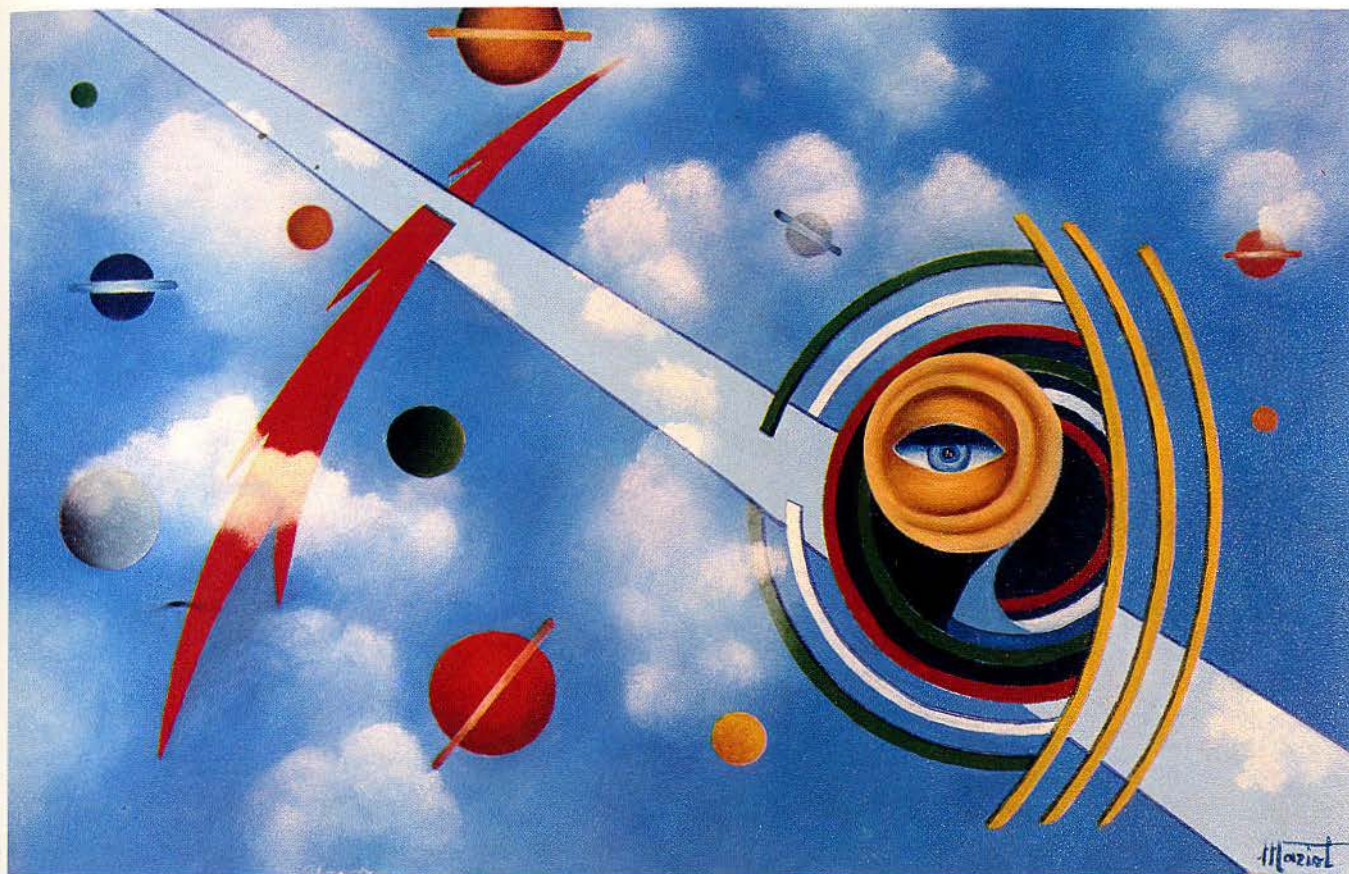
I have reason to mention these two countries: the former because its sensitivity has never changed whether under centre-right or socialist governments; the latter because it has fully kept it up despite the Thatcher government's cuts to public expense.

Our government too, as a whole, must engage in strengthening the Italian Defence industry.

Lastly, I would like to mention the issue of extra-European exports of Italian weapons to make the point on a matter which has caused arguments and controversies.

The extra-European export component is an important market outlet because it helps to increase the productive volumes with a corresponding decrease in costs and because it permits a confrontation and an ensuing verification of competitiveness.

However, it is not determining. The future of a solid Italian Defence industry lies in the supplies



required for a well organized European Defence and not in export to third world countries.

It must not be forgotten that countries such as Brazil, Argentina, Korea, Singapore and South Africa are beginning to look at the extra-European markets for the survival of their own national Defence industry.

Will the Italian Defence industry, in the coming years, be able to face the challenge in terms of quality and costs?

My answer is "yes": at least in certain sectors and if a combined action is undertaken by Italian firms and European enterprises.

The coming years will be a period of transition: a period of increasing European productive integration and, at the same time, Defence industries still, for the most part, national.

Whereas, for the weapons of the year 2000 the Defence industry will have to be European and integrated within NATO.

An example for this comes by observing what is happening in the Fiat Group: among the firms working for Defence.

I am making the example of the second generation tank on which IVECO is working.

A tank requires an average of 8 years of study and planning, it is operationally valid for 15 years but about 5-6 years after its birth a further planning must be started.

Ten years ago we used to buy tanks from Germany: these were the first generation tanks, the Leopard 1.

The second generation tank, in-

Industry and the Armed Forces together can give an important contribution to the process of transformation of Italian society and to the rediscovery of certain values which seem to have faded away.

stead, is the result of an Italian association of industries of which IVECO-Fiat is part together with OTOMELARA. In it all the most advanced technologies are present: in the motor, electronic, optoelectronic and new material field. We may actually say that we are in the presence of a high military technology system which falls back onto civilian productions.

If we had not organized ourselves to be present in the second generation, Italy and Italian industries would be excluded from the third generation tank project which will be European and will come out around the year 2000, the feasibility surveys of which are already being carried out.

Indeed, among the nine Nato member nations taking part in these feasibility surveys, the key position has been attributed to Italy, to IVECO, an Italian industry.

Until now I have not mentioned management and the direct cooperation between Armed Forces and In-

dustry. I deem this point very important.

Industry owes a great deal to the Armed Forces: we would never have been able to create a modern industry, in Italy or abroad without referring to the military organization pattern, its logistics and strategy.

The logics of project management taught in business schools derive from military experiences.

In the world of undertakings and enterprise these logics have had a very interesting development.

It is thus a question of consolidating a cultural exchange which has always existed, though in a fragmentary manner, and which we may strengthen nowadays, especially as regards management and technical knowledge.

The above at three different levels:

- at high management level of the Armed Forces and particularly at the level of Study Centres, Academies and Higher Institutes of the Armed Forces: I am certain that we can create cultural managerial initiatives and high level research, thanks to the high scientific standing of their institutions;

- at intermediate level: the industry finds in its leaders and intermediate cadres one of its bearing columns in which management can merge specialized capacities. Italian Armed Forces probably need to elevate the degree of knowledge and management of their own middle cadres staff. We may cooperate through well planned initiatives of periodical exchanges and stages within the firm;

- at technical level: the extreme sophistication of Defence means poses important issues as regards repairs and maintenance. The Italian industry is ready to make the modalities of specialistic updating of its men more systematic and efficacious.

I believe, however, that the objective of a stronger cultural exchange between Armed Forces and industry must be more ambitious and go far beyond a technical and operational cooperation.

It is a question of giving more



consideration to the managing class of the Armed Forces as a salient component of our Country's managing class.

It is right to incorporate military men in the managing class because, at the high levels, they are one of the most international components of our Country.

Cultural and social synergies useful to Italian society as a whole may derive from a greater custom to relations and mutual knowledge between the industry and the Armed Forces.

Lately, the industry has gained in home and foreign prestige which had been strongly weakened by the penalizations and disputes of the 70s.

The Armed Forces have also reached a cultural and technologic development of great importance but as yet few realize it.

Traditionally, the Armed Forces, for instance, have always been the custodians of the value "Fatherland"; a value which seems to have been forgotten even because of too much rhetoric and too much instrumentalization.

Industry and the Armed Forces together can give an important contribution to the process of transformation of Italian society and to the rediscovery of certain values which seem to have faded away.

Traditionally, the Armed Forces, for instance, have always been the custodians of the value "Fatherland"; a value which seems to have been forgotten even because of too much rhetoric and too much instrumentalization.

Yet, with the view to an European unity which should not be levelling, the value of national identity must be re-established: in modern terms, quite different from those of the past. It must, however, be re-established.

If we wish to be more European we must also be more aware and proud of our origins and of our history. He who does not acknowledge them is not modern: he is simply weak.

This is only an example to say: what we have in common is professionalism and respect for values. It will not be difficult to create cultural and operational synergies. And this will be very useful. This is not only an expectation: it is a commitment.



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THE PARIS CONFERENCE ON CHEMICAL WEAPONS

On 11 January, 1989, after five days of work, the international Conference on the ban of chemical weapons ended in Paris at the UNESCO building. 1030 official special correspondents informed the world on the trend of the debate carried out by representatives of 149 Countries.

The Press service of the Conference supplied a statistical picture: 992 delegates, among whom the UNO Secretary General, Perez de Cuellar, the Deputy Secretary General for disarmament, 110 speakers for a total of 26 hours, twenty meetings of geographic and political groups, 125 bilateral meetings at foreign ministry level, an undefined albeit high number of side talks, especially those organized by the United States and the Soviet Union and 45 bilateral meetings called by the French.

Seventy interpreters secured the equivalent of 329 working days and 1.3 million bulletins were printed and handed to the special envoys.

The aims of the Paris Conference were the following:

- re-launch the 1925 Geneva Protocol on the prohibition of the use of chemical agents in war operations;
- reach an agreement in principle, as vast as possible, on the global ban of chemical weapons;
- give a decisive acceleration to the Geneva negotiation on disarmament, especially as regards the prohibition of manufacturing and accumulating chemical weapons.

Did it achieve these goals? What else emerged from five days of official declarations, secret meetings, confidential talks, press conferences and cross messages?

The six points of the final declaration unanimously approved may be summarized as follows:

- Participating States acknowledge the importance and the continuous validity of the 1925 Geneva Protocol (of which France is the depositary) on the ban of choking, toxic and other similar gases and biological means in war operations;

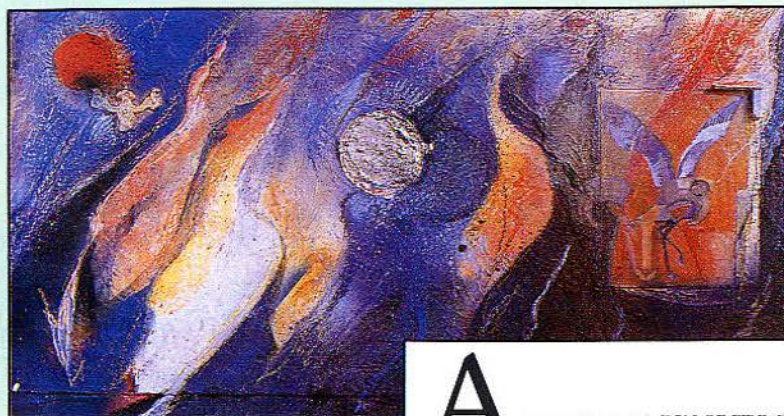
- Participating States underline the need for a short term conclusion of a Convention on the prohibition of manufacturing, preserving and employing chemical weapons and on the destruction of the existing stocks. The Convention, unlimited in time, will be universal and global and its application actually verifiable. With this in mind, the forty Nations taking part in the Geneva Conference on disarmament are urged to reach an agreement.

- As long as chemical weapons exist and are widespread, peace and in-

ternational security are threatened. The participating States underline the necessity that the future Convention be established on a non-discriminating basis. Meanwhile they deem that each State should give proof of capacity and sense of responsibility.

- Full support should be given to the United Nations Secretary General as regards enquiries and controls in case the 1925 Geneva Protocol is violated. The participating States believe that the efficacy of the existing procedures should be strengthened and invite all the States to cooperate and facilitate the Secretary General's decisions.

- Participating States underline the need to insist with determination on the efforts towards a global disarmament under an efficacious international control.



ARIES, THE RAM, SIGN OF FIRE, FIRST OF THE ZODIAC. THE VERY BRIGHT STARS HAMAL AND GAMMA SHINE IN THE SMALL FIERY CONSTELLATION OF ARIES. HERE THE SEASONAL CYCLE STARTS. THE ARABIAN PHOENIX ARISES FROM ITS ASHES.

THE FLOOR AND THE BACKSTAGE

- The combat between the F-14 of the Kennedy aircraft carrier and the Libyan Mig-23-S in the Mediterranean sky, a hundred miles off Tobruk, which reached its peak in the destruction of two of Khaddafi's aircraft;

- The difficult controversy between the White House and the State Department on the one side and the Tripoli Government on the other on the Pharma 150 chemical plant installed by the Colonel in the desert area of Rabta and considered by both Americans and Israelis the biggest plant of chemical agents in the Arab world, much bigger than those situated in Damascus and Samarra;

- American charges against the industries of Federal Germany and other not better identified countries, held responsible for technologic supplies and for giving support to Lybia in the construction of the Rabta chemical plant;

- The risk of the proliferation of chemical weapons and the supply of chemical agents to terroristic groups.

Within the more complex Mediterranean and Middle East situation, the above represented and partly still represents a heavy mortgage despite the formal declarations approved by the plenary Assembly of the Paris Conference in the evening of 11 January, 1989.

Behind the facade of the meeting headed by French foreign minister Roland Dumas with style and class proportioned to the magnificence of the seat and the splendid setting, intense and often harsh confrontations arose together with frail and underground contacts, ciphered talks, strange dialogues between deaf years (South Africans and other African countries, the former reminding us from the platform of exchanges and continuous contacts, the latter ready to leave the hall as soon as foreign minister Botha took the floor). Skillfully filtered news and indiscretions circulated on the Gulf situation, the Middle East, agreements,

plans, commercial and industrial goals, while the coincidence of Soviet-American interests hovered over everything, almost tangible, in its conditioning density.

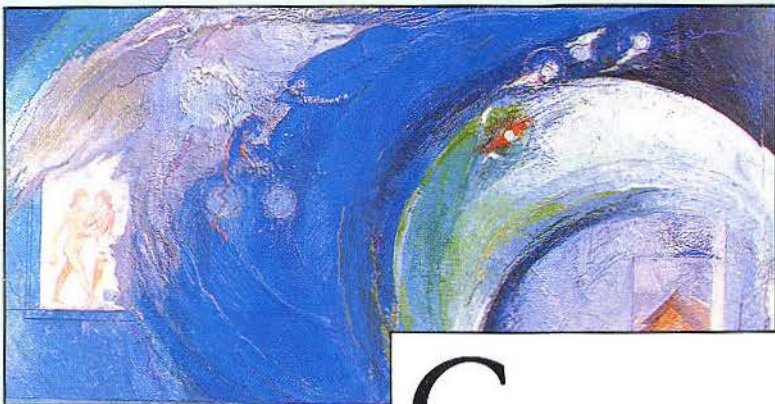
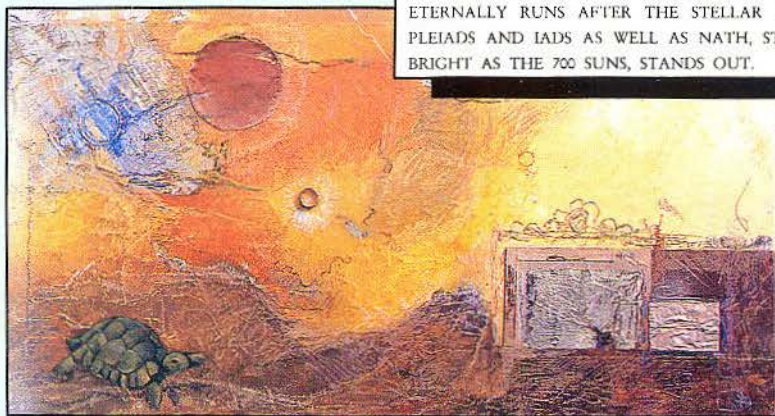
At the basis of the skirmish, often carried out and manoeuvred with skill and amazing open-mindedness, intervalled by arrogance and persuasive dialectics, elegant in its form, ambiguous in its substance, were the declarations of State Secretary George Schultz and those of Soviet foreign minister Eduard Schevardnadze.

The afternoon of the first day of talks, Schultz spoke of the absolute necessity of stopping the proliferation of chemical weapons belonging to — he said — nations which favour terrorism. An indirect hint to Libya and Syria. Schultz then underlined some standing points of the American policy: the firm

engagement in the ban of chemical agents, aid to gas-stricken populations, sanctions against Nations which do not respect the Geneva Protocol, invitation to industrialized countries to control transfer of technologies, the establishment of an agreement on international controls.

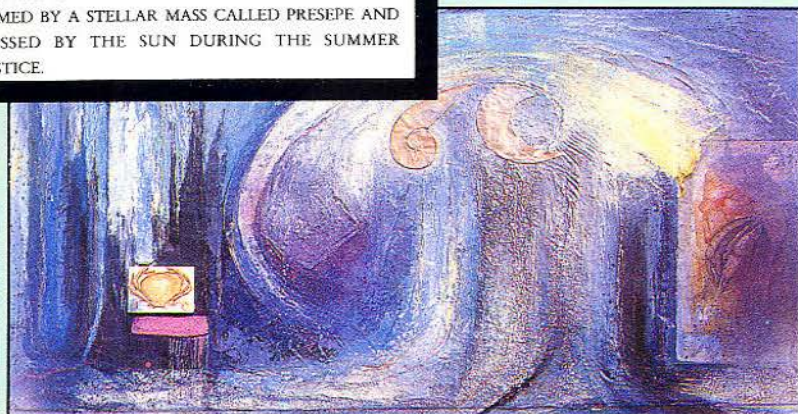
The following day, January 8th, the head of Soviet diplomacy, Schevardnadze, firmly invited the representatives of the other 48 countries to approve the Convention on the ban of chemical agents and the destruction of arsenals by the end of the year and advanced the proposal of a Conference in Geneva at foreign minister level with respect to the new international climate and the outlook concerning disarmament. No one, Schevardnadze declared, can refuse unrestricted controls on one's territory. He then continued by saying that the Soviet

I AURUS, SIGN OF EARTH AND SECOND OF THE ZODIAC. BIG CONSTELLATION IN WHICH THE GIANT STAR ALDEBARAN WHICH ETERNALLY RUNS AFTER THE STELLAR MASSES PLEIADS AND IADS AS WELL AS NATH, STAR AS BRIGHT AS THE 700 SUNS, STANDS OUT.



G EMINI, SIGN OF AIR AND THIRD OF THE ZODIAC. CASTOR (WHITE STAR) AND POLLUX (ORANGE STAR) ARE THE ONLY FIRST CLASS STARS GRAVITATIONALLY BOUND TO MANY OTHERS OF THIS INTERESTING CONSTELLATION.

CANCER, SIGN OF WATER AND FOURTH OF THE ZODIAC. SMALL CONSTELLATION DEVOID OF BRIGHT STARS AND CHIEFLY FORMED BY A STELLAR MASS CALLED PRESEPE AND CROSSED BY THE SUN DURING THE SUMMER SOLSTICE.



dispatches with new particulars on the role played by German industries in planning and building the Rabta plant, on the involvement of Taiwan and Brazil in the establishment of the plant and on the movements of chemical and industrial materials directed to Libya from the ports of Rotterdam and Anverse and while the characters who had pulled the strings of the entire event came out of the shade, Libya announced its autonomous decision to stop the production of chemical agents and stated that the Geneva Convention prohibits the use of chemical agents but not their production or preservation.

Meanwhile Iraq informed that it was oriented against signing a convention for the global ban of chemical weapons. Later on this position was abandoned, formally speaking at least; Federal Germany — with foreign minister Genscher's speech — faced the problem in its general terms and expressed full support in favour of the elimination of this class of weapons, albeit accurately avoiding all that even hinted to relations with Libya.

Israeli foreign minister Moshe Arens proposed the prohibition of exporting basic products needed for the manufacture of chemical agents and reminded the audience that Israel had published a complete list of them. The Israeli minister, moreover, favoured the publication of the names of industries having technologies and scientific knowledge fit to manufacture chemical agents and underlined that this was the most important point of the entire issue. An aspect which could not, obviously, come up but which enclosed in itself the substance and, most likely, most of the motivations at the origin of the conference itself, sponsored by Presidents Reagan and Mitterand. The scenery within which the confrontation between United States and Libya was the critical factor, was now almost complete.

The platform was the convex mirror of diplomatic methodologies, attitudes and evaluation standards. In-

LION, SIGN OF FIRE AND FIFTH OF THE ZODIAC. HUGE CONSTELLATION WHOSE STARS ARE VERY BRIGHT AND DRAW THE IMAGE OF THE KING OF ANIMALS REGOLO. A FIRST CLASS WHITE STAR, IT IS ALSO THE BRIGHTEST.



Libya too must progress in this direction. The fact of giving hospitality to Abu Nidal, the minister concluded, is of no help for the efforts towards cohabitation.

Arab countries such as Syria, Libya and Iraq, with apparently univocal, albeit substantially different motivations, together with Iran, Rumenia (and later) Brazil insisted on relating chemical disarmament to nuclear disarmament and attacked, especially the former together with Iran, Israel and the United States maintaining the legitimacy of possessing chemical weapons, considered as a vital deterrent and absolutely necessary for the security of the respective countries, exposed to the threat of Israel defined by Libyan foreign minister Ethali, a terroristic entity and a racial regime.

While press agencies circulated

Union favours combined international actions aimed at preventing the proliferation of chemical weapons. After reminding us that the Kremlin passed from silence to the publication of data on its arsenals, from the stocking up of chemical weapons to the decision of eliminating them, he added that as from this year and without waiting for the conclusion of the new international treaty, Moscow will start destroying its chemical weapon reserves.

Other elements arose:

- Foreign Minister Andreotti, after favouring a more determined global action designed to avert the danger of chemical agents, added the objective, especially in the Mediterranean, is to remove suspicions and

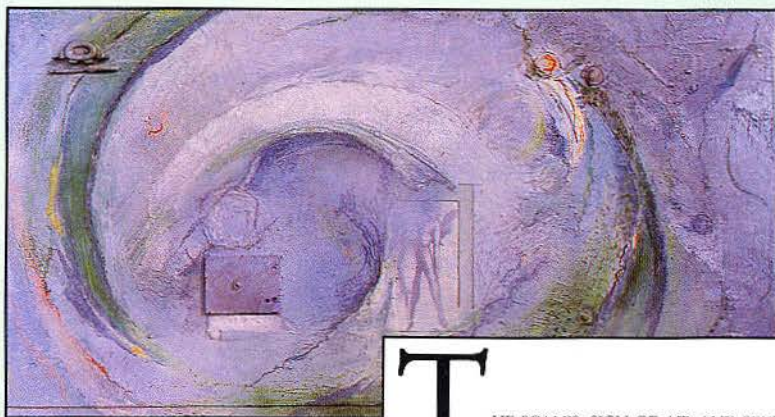
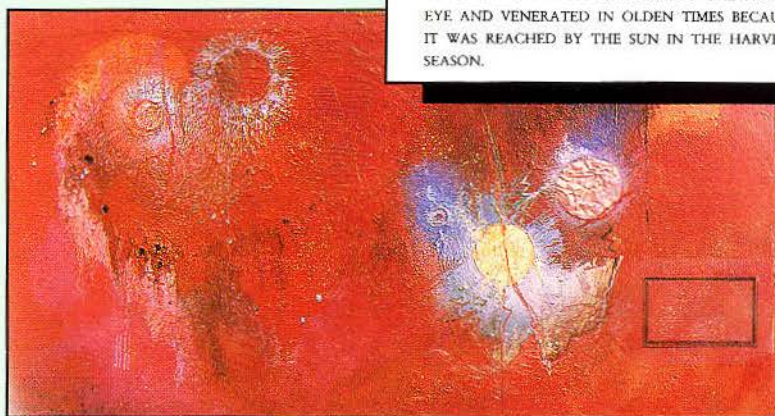
discretions were creeping in the corridors: industries of the more advanced countries sign contracts with the so-called third world countries for supplies, all included, of chemical plants; France signed an agreement with Libya; a 20 billion franc business for water plant equipment; there is also talk of Mirage. The "Time" states: in Rabta colonel Khaddafi can manufacture chemical agents. France has been training for years to face chemical war; even Switzerland is getting ready for it. Between indiscretions Libya expels 250 Western journalists after a phoney visit to the Rabta plant. Western special envoys managed to see the hangars from afar and enveloped in darkness. Reports are thick with irony, sarcasm and indignation. There is talk of abuse. While all this was happening, delegates in the UNESCO building were reading official declarations and the appropriate committee was working on the draw up of the final bulletin. It is hard to find a compromise.

An all but soothing situation rests on the background. Thirty nine countries, according to recent information, possess chemical arsenals. Among these, besides the Soviet Union, United States, France and Iraq, Egypt, Syria, Israel, South Korea, Pakistan, Cuba, Rumania and Libya. The destruction of arsenals will be a lot more complicated than their manufacture; the elimination of a ton of agents will cost 150 thousand dollars at least. Soviet Union says it possesses 50 thousand tons. NATO sources believe that Soviet arsenals contain from 300 to 700 thousand tons. The United States own about 100 thousand tons. The elimination of such a bulk requires no less than ten years. Old generation chemical agents. Now we have turned to binary weapons which are easier to keep and less dangerous.

Will the international Convention which will have to follow the Geneva Conference be able to guarantee the global ban, bearing in mind that binary weapon components, if considered singularly,

cannot be employed as chemical agents. A plant employing Thiodiglycol (used for the manufacture of pesticides, ink and paint) cannot be considered a chemical weapon manufacturing plant. But if we think that by mixing Thiodiglycol with hydrochloric acid we obtain mustard gas, best known as yperite, and that with 270 dollars we manufacture 270 kilos of mustard gas capable of affecting one million people, the aspect of the matter changes. Another example is the fact that two harmless liquids when used alone, isopropanol and methylphosphonildifluoride when mixed together turn into that lethal nerve gas known as Sarin. Thus the difficulties involved in controls are understandable as are the risks which threaten verifications concerning the existence of arsenals and productive possibilities.

VIRGO, SIGN OF EARTH AND SIXTH OF THE ZODIAC, SPICA, FIRST CLASS STAR, SHINES IN THIS CONSTELLATION RICH IN MASSES OF GALAXIES ALMOST INVISIBLE TO THE NAKED EYE AND VENERATED IN OLDEN TIMES BECAUSE IT WAS REACHED BY THE SUN IN THE HARVEST SEASON.

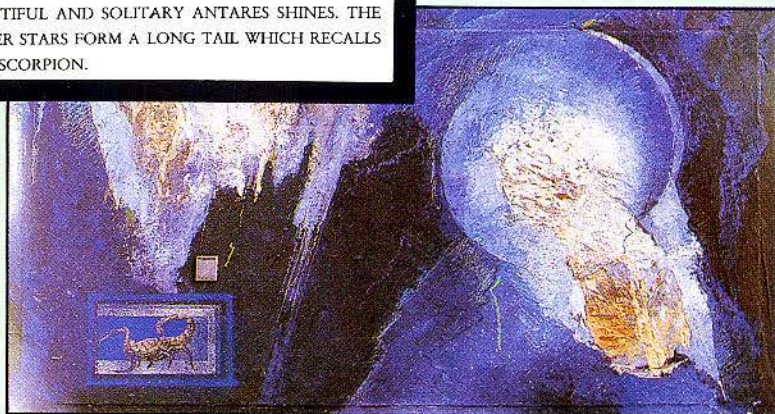


THE SCALES, SIGN OF AIR AND SEVENTH OF THE ZODIAC. A RATHER SMALL CONSTELLATION SHAPED AS A SCALE. THE BRIGHTEST STAR IS ZUBENELGENUB, WHITE AND BRILLIANT JOINED BY ZUBENESCHAMALI RARE GREEN LIGHT STAR.

WILL SOMETHING CHANGE AFTER PARIS?

The sole foreign minister who openly proclaimed the passage from second to third generation chemical agents was George Schultz. The United States is renewing its arsenals and once the operation is concluded it will allow international controls to take place. All the others eluded the subject. What has really changed in Paris? Do the various countries really want to eliminate chemical weapons? Will the different States really cooperate with the UNO Secretary. Will the UNO Secretary be given investigative powers unrestricted by Security Council control and without the snare of cross vetoes?

SCORPION, SIGN OF WATER AND EIGHTH OF THE ZODIAC. HUGE CONSTELLATION CROSSED BY THE MILKY WAY WHERE THE BEAUTIFUL AND SOLITARY ANTARES SHINES. THE OTHER STARS FORM A LONG TAIL WHICH RECALLS THE SCORPION.



In Paris, Iranian foreign minister Velaati circulated photographs of the Halabja massacre by the Iraqis and observed that the conference was too moderate and conservative and that Baghdad had not been condemned for the use of nerve gas. Most of the delegates addressed the Chairman of the Assembly, the French Roland Dumas, and indirectly the French President Mitterand commenting on the role of France almost as if wanting to attribute the Elysium the role of third force in the world diplomatic dialogue. In fact, during the Paris Conference it was felt that what was really lacking was a third pole.

The Arabs threatened to make the Conference fail and insisted on the liaison between chemical and nuclear armament and accused Israel of disrespecting the right of the people of Palestine to self-government.

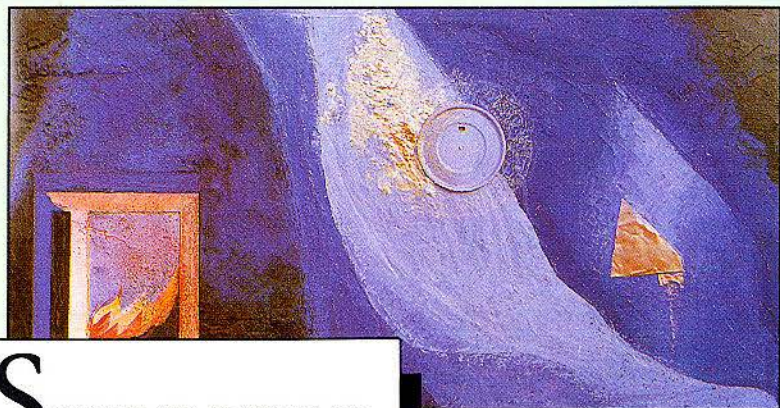
Syria, through foreign minister Al Shara'a, ran down the Western press (especially American) because it justified the chemical and nuclear arsenals of certain countries (a clear hint to Israel) and considered those of other countries with suspicion, retaining them devoid of the necessary political maturity. Israel replied and defined the Arab position cynical and insincere. Libya cut into the concert of complaints and invoked the ban of agents without discrimination or distinction. While the agreement on the final text was fraught with difficulties, Americans and Soviets took the floor: the former excluded any possible liaison between chemical and nuclear weapons and made a general hint to global disarmament while the latter underlined that the subject matter of the conference was chemical weapons and that this was the sub-

ject the document had to consider. The non aligned countries played a sort of negotial role, but none of the observers present at the Conference ignored the determining, decisive, unquestionable weight of the two superpowers and gave credit to the suspicion that the idea of a liaison between chemical and nuclear weapons was a well-devised manoeuvre. No doubt, instead, on the absence of Europe as such.

In sum, the Conference did not much change the pre-existing situation. The condemnation of chemical weapons does not exclude piling them up and manufacturing them. Some delegations clearly showed their unwillingness to abandon, without precise, albeit undefined guarantees, resorting to chemical weapons to oppose an aggression. Juridically it is legitimate to manufacture gases. Also in the presence of a global ban this will be legitimate technically speaking too.

Morally speaking, chemical weapons have already been condemned in 1925. In spite of this, however, in recent years gases have been employed in Afghanistan, Cambodia, Chad, Sudan, Ethiopia, Angola, Vietnam, Iraq, Iran and probably in Nicaragua. The only authentic merit of the Paris Conference is that of having drawn the attention of all the world on the dramatic issue which must not be undervalued. As for the rest, realism asks for prudence and objectivity as opposed to the emotionality and the yearnings which so often drift into utopia. This does not mean that we must not negotiate and pursue the path towards peace (in actual security). It means considering reality. When Libya asks for non discriminating international agreements, it probably refers, among other things, to the legitimacy of the Rabta plant. The United States objects that the risk lies in the Tripoli Government's reputation and in its declared support of terrorism.

Colonel Khaddafi, provokingly, compares Abu Nidal to George



SAGITTARIUS, SIGN OF FIRE AND THE NINTH OF THE ZODIAC. AMONG THOUSANDS OF NEBULAE AND STELLAR MASSES THE YELLOW SUPER GIANT KAUS AUSTRALIS DRAWS WITH OTHER MINOR STARS THE CENTAUR CHIRONE, HALF MAN AND HALF HORSE WITH BOW AND ARROWS.

Washington. It is difficult to say if something has changed after the Paris Conference and if the sense of humour in American political circles prevails over the annoyance. There are many tension hotbeds, especially in the Mediterranean. We should wonder where the threshold beyond which it is dangerous to go may be.

THE ATOMIC BOMBS OF THE POOR

It was at least three years that the Bonn Government knew of German industry involvement in the construction of the Rabta chemical plant. The German-Libyan cooperation seems to go beyond that: one of the most ambitious projects concerns a railway from Tripoli to Togo and Cameroun, German colonies till 1918. This is what the German press wrote and no one, it appears, officially belied the indiscretions. Conference circles showed a certain uneasiness when faced with questions concerning the above.

If in an undefined period of 1987 the Americans were concerned over what was going on in Rabta and in December of that same year officially manifested this concern, it is likely that they informed allied countries or part of them at least through confidential intelligence channels. Why then and for what mysterious reasons was the plant established?

Where can the transfer of technologies go without damaging security and compromising economic and thus strategic balances?

Foreign Minister Andreotti, in reporting to the foreign Committee of the Senate on the Conference and the Mediterranean situation, said, among other things: "Many of those who point their finger at us and unfairly accuse us of wanting to increase business with Libya, would do better, above all, to underline their persistent and indeed increased economic interests in that country. I must mention that, according to our information, many European

firms of primary importance are listed among Libya's customary suppliers and that oil participations in the main world companies still appear very important.

Perhaps, minister Andreotti's words help to better interpret four positions which came up in Paris.

- Syria, Iraq and Libya intend applying literally the 1925 Protocol which prohibits the use of gases but not their manufacture and preservation.

- While talking to journalists, one of the American delegates observed: "We must not read only the final document, albeit consider all the disagreements. The document must be read bearing in mind the disagreements stated during the Conference."

The Iraqi delegation circulated, outside the UNESCO building, a white book entitled "Chemical

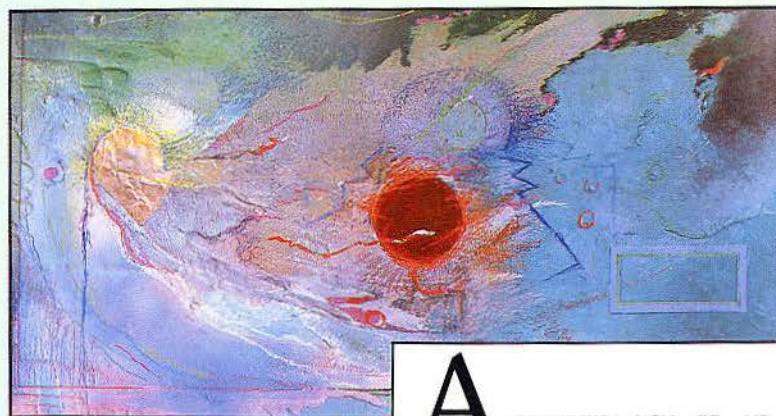
weapons in Iran — Facts and Declarations". In the introduction (the text is in French) we read that Iranians have a chemical agent plant in Marv-Dacht and a chemical warhead factory for missiles in Damghan, in the northern part of the country and that experimental launches were carried out in the region of Semnan, east of Terhan. According to this book, "Iran produces toxic gas in the petrochemical plant in Razi and in the Iranian-Japanese chemical plant in Bandar Khomeini".

- Neutral Western diplomatic sources, which would rather not be mentioned, reminded the audience that in March of last year the spokesman of the Dutch Ministry of Justice announced that the custom authorities of his country had blocked eight containers loaded with chemical weapons or pieces

CAPRICORN, SIGN OF EARTH, TENTH OF THE ZODIAC, MYTHOLOGICALLY CONNECTED BY THE ANCIENT GREEKS TO THE GOD PAN, HALF MAN AND HALF GOAT. A NOT VERY BRIGHT CONSTELLATION IN WHICH THE GREAT GAEDI FORMED BY A PAIR OF YELLOW GIANT STARS STANDS OUT.

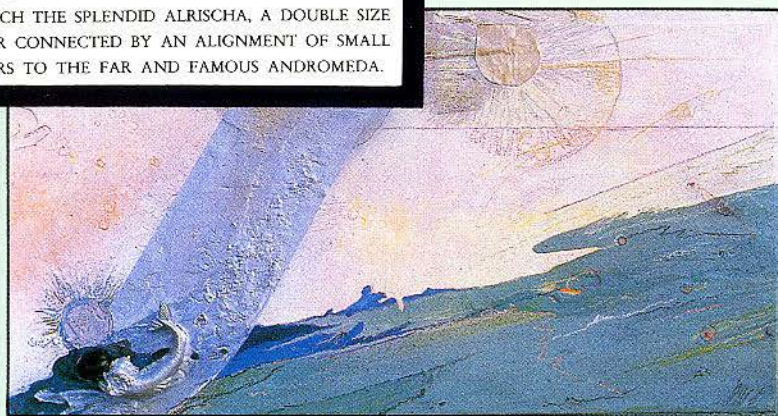


AQUARIUS, SIGN OF AIR AND ELEVENTH OF THE ZODIAC. IN THIS HUGE CONSTELLATION, FULL OF GALAXIES AND LOCATED NEAR THE EQUATOR THE SOLITARY SADALMEK STANDS OUT NEAR THE DWARF CELESTIAL BODY.



P

ISCES, SIGN OF WATER AND TWELTH OF THE ZODIAC. BIG CONSTELLATION RICH IN NOT VERY BRIGHT STELLAR MASSES AMONG WHICH THE SPLENDID ALRISCHA, A DOUBLE SIZE STAR CONNECTED BY AN ALIGNMENT OF SMALL STARS TO THE FAR AND FAMOUS ANDROMEDA.



employed with missiles, rockets, artillery and mortar bullets, air bombs and mines, range from mustard gas, first used by the Germans in 1917, to nerve gas. Mysterious names such as Tabun, Sarin, Soman, VX, Lewisite and the sadly known Zyklon-B all mean death.

Piero Baroni

Professional journalist, editor of Giornale Radio 1, contributor to the History Office of Army General Staff.

designed for such weapons coming from the United States and destined to Iran. The information, added the source, appeared on the Tunisian newspaper, "Alsabah". Another Arab daily, "Alshara Alawsa" informed, a few days later, that the spokesman of the American Ministry of Justice had made known that an enquiry carried out by the custom office confirmed that the load at issue had been illegally exported from the United States and that it contained elements for the production of chemical agents. The parallel with the Rabta plant and the German involvement together with the passage of the load through Holland, leads us to further considerations.

Moreover, according to diplomatic sources, we learned that in three plants protected by particularly strict security measures, Semnan, Damghan and Shahrud, Iranians are perfecting chemical noses for Scud-B and Sam-2 missiles. As for Iraq, it seems that it has successfully tested its first ballistic missile.

In the light of the above, a declaration issued by the Deputy Secretary of State H. Allen Holmes during a press conference via satellite from Washington on 4 January, 1989 is of the greatest importance. One of the major problems facing the Bush administration after its installation seems to be the proliferation of medium range missiles.

One question remained without an answer and only received a cor-

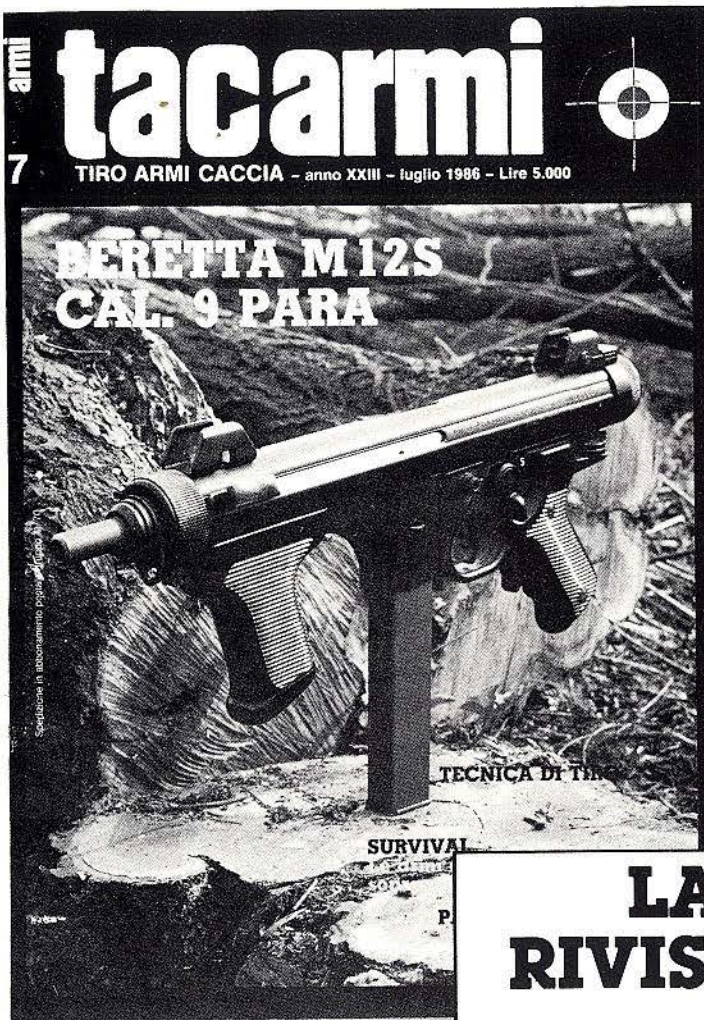
teous refusal and a friendly promise of returning on it some other time.

How has the Mediterranean situation changed seeing that Libyan combat aircraft may be refuelled in flight by systems delivered and installed by Federal German industries, considering that Israel now comes within range of Libyan aircraft and making account for the fact that several Middle East and North African countries dispose or may easily dispose of medium range multiuse aircraft?

The atomic bombs of the poor, which as well-known may be

The twelve tables (all 60x100 cm) are painted with a mixed technique on wood and were exhibited at the Sforzesco Castle in Milan during the "L'Inquietante ricerca del domani" exhibition: Astrology through the books of the Biblioteca Trivulzian and Ninna Verga's paintings, formally opened on 15 November, 1988. The texts of the horoscopes are by Maria Luisa Belmondo.

THE PARIS CONFERENCE ON CHEMICAL WEAPONS



è

LA PRIMA RIVISTA D'ARMI

pubblicata in Europa nel 1964, è il mensile dei tiratori, dei cacciatori, dei collezionisti di armi da fuoco moderne ed antiche e di tutti coloro che operano nel settore armiero. Pistole e revolvers, fucili a canna rigata e liscia, armi militari portatili, armi d'epoca, storia

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NON NUCLEAR DEFENCE IN





EUROPE

STRATEGIC AND OPERATIVE ANALYSIS

They speak more and more about conventional war in Europe, that is a big war, a classical war, with arms and manoeuvres. This kind of war is thought about as a real possibility for the first time in more than thirty years. In the United States we spend more and more money on conventional arms than on nuclear arms.

In the US Defence budget the proportion destined to nuclear weapons is decreasing more and more: the only reason why we spend totally 300 billion dollars is that we take conventional defence seriously. Otherwise our budget for nuclear and intervention weapons would amount at most to 100 billion. So, those 200 billion left over, that unbalance the American Federal budget and that we owe Japan, are the consequence of the fact that we really take conventional defence seriously. And it seems that also Europe is starting to think this way. Of course, the reason is that our trust in the use of nuclear weapons, in the nuclear deterrent is slowly but continuously decreasing. The nuclear deterrent still remains, but is less and less credible.

Thirty years ago the nuclear weapon was so strong, so predominant to hold in itself the whole phenomenon called war. But in practice, we never accepted the concept of massive retaliation completely, otherwise we would have abolished Army, Navy and tactical Air Force, keeping only thermonuclear bombs and all equipment to launch them.

Yet, even if we did not accept this logic fully, we tried to solve all our biggest military problems through nuclear arms and deterrent. This was a very good strategy; it was the right strategy for a defensive alliance that could not take any initiative and had no intention to invade those areas controlled by the Soviet Union. We used to say: "if you move, the reply is retaliation". And this was right for democratic Countries wishing to use their resources for social and economic development, for Countries that are not



willing to ask the population for heavy sacrifices.

So, nuclear defence was a very good defence.

Personally, I consider the nuclear defence policy very good: it is a policy that, in my own small way, I have always supported, trying to put forward plausible reasons in order to make it more credible, to go on with it.

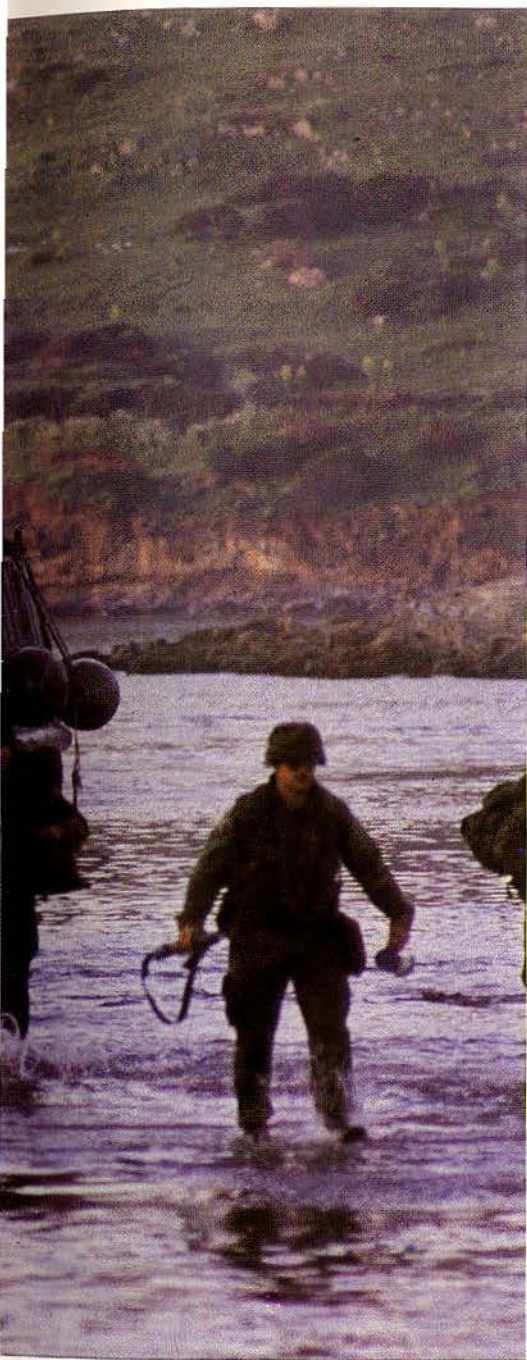
But it is necessary to realize the objective reality: our trust in nuclear deterrent is decreasing day by day.

It has already happened that the credibility of our strategy was seriously jeopardized by the unpleasant incident in Chernobyl. When a Power can unintentionally damage the strategy of another Power because of an incident in one of its nuclear reactors, then it means there is something really morbid and wrong with that strategy. Without the incident in Chernobyl, we would have realized the gap between our statements and the strategic reality on the occasion of a reply to an attack.

In other words, we are gliding towards a post-nuclear age. So, war is drawing near. Driven out of Europe after 1945 (it survives well elsewhere), war is just waiting for a further decrease of the nuclear deterrent to come back to Europe, where it has always lived so well.

But how is it possible to fight a war if there is no enemy willing to make it?

Today the Soviet Union is not so threatening as in the past; it is almost kind in its search for a



They speak more and more about conventional war in Europe, that is a big war, a classical war, with arms and manoeuvres. This kind of war is thought about as a real possibility for the first time in more than thirty years.

liberalization process. There is no crisis between East and West. We are not living a pre-war time, that is a period during which war is prepared seriously. We live the time before the pre-war period, that is the period when everybody is convinced that war is humanly absurd. It is absolutely necessary to think that war is humanly absurd to start living a pre-war time. Today we are convinced that war in Europe is absurd, we are convinced that it is ridiculous to think of an action bet-

ween armour in Europe — a place with a so varied geographic situation —, or to imagine that our holidays might be broken by armoured columns on our motorways.

If this pre-war time did not exist, a time when everybody is convinced that war is humanly absurd, it could be possible to take precautions to avoid war, with arms or through diplomacy, in order to worry or to come to an understanding with the enemy. But when no one does his best to avoid war (since it is absurd),

and when the utilization of the nuclear power is less and less credible, then war can come back.

This is my way of examining the matter. Which is the biggest problem when a change from a strategic period to another takes place?

It is the problem about the ignored "assumptions". Our military structures are full of nuclear "assumptions". The nuclear weapon is in decline, but a lot of what we do every day is still based on it. According to the Finance Ministers, the



main merit of the nuclear power was that there was no need to prepare war seriously. The military forces and designs could — at most — be almost symbolic. The choice of some armaments could be the result of industrial and commercial factors. The development of operative or tactical systems could be avoided.

Naturally, the Armies of the Alliance were always too full of officers being too much motivated by their sense of military seriousness, to comply with this professional irresponsibility that the nuclear power allowed us.

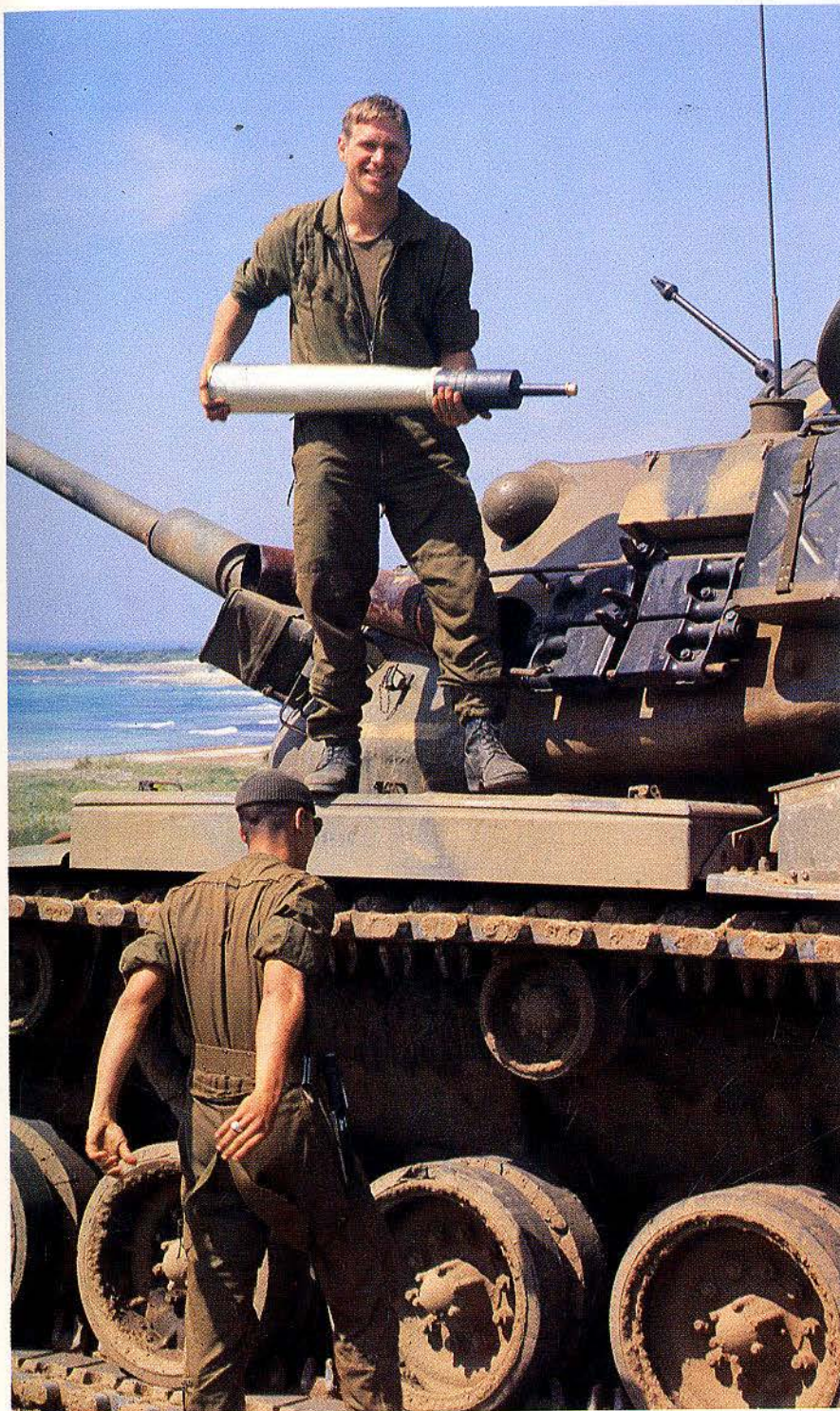
If everything is based on nuclear power, it is possible to say: let us buy only those munitions we need for a short training, let us buy arms for parades, let us leave our real tactical-operative capacity let us atrophy, let us neglect the real training; but we did not do so, because of those many officers who really believed in the military profession, and wanted to strive seriously, even

Today we are wrongly convinced that war in Europe is absurd, we are convinced that it is ridiculous to think of an action between armour in Europe, or to imagine that our holidays might be broken by armoured columns on our motorways.

when everything was based on nuclear power. This is the reason why we kept trained forces and a high quality level in many sectors.

In fact the level of seriousness remained but it is different from one Country to another: for example the amount of munitions some Armies bought is very small, and so, too

scarce for a war. Some Armies kept quality forces only within special units, being in fact top-quality forces. This was a human triumph for the officers, who were told that after five minutes everything would be controlled by nuclear power. But in many cases there were no serious efforts, and there is no quality.



structural reorganization, or new tactical measures. For example, today it is possible to stop an armoured attack with attack systems in depth, or with obstacles, evasive tactics, more training and less equipment.

The problem in this post-nuclear age is that everything must be taken seriously; the new technology cannot be considered from the symbolic point of view anymore, the need for adequate munition supply and a real training for the real war cannot be ignored anymore. The result is that for now we are getting a very small benefit from the new technology for the defence of the Alliance. There is much talk about this; but not much or almost nothing is being done.

At present, the American Army is going to introduce a new bayonet: even if useful, the bayonet cannot be considered the product of new technology. If we mean new technology in the sense of arms that were not available in the Armed Forces during World War II, we can be astonished at realizing how scarce it is.

We have to choose among technologies, and not according to their technological content, but to their military importance, and we have to choose according to specific needs, and not on the basis of general symbolism.

Now I would like to examine two examples. One is the so-called FOFA (Follow on Force Attack), that is attack systems in depth.

I do not want to criticize the FOFA, but only to examine its structure.

In a nuclear age, the FOFA can be useful as a proof of solidarity; moreover some aspects depend on industrial factors. But in a post-nuclear period the FOFA must be examined from the point of view of its military usefulness. The problem is to attack targets in depth. For now, let us leave out of consideration the importance of these targets, and let us make a first military test in order to discover if it works, before wondering if it works well enough to justify its costs.

We helped a certain military culture because of professional irrationality, but this was not enough: too many units of the Atlantic Alliance do not have a real war capability.

What happens in the change from the nuclear to the post-nuclear period? There is no way to resist

the temptation to examine modern technology in the light of the nuclear age: that is to examine it from a symbolic point of view, from the point of view of its industrial interest, instead of making, first, a tactical-operative analysis. Nobody wonders if it is possible to solve the same problem through a



The difference between a military system and a civilian system is that a military system must work in a place where there is an intelligent enemy who does not want it to work. It's not like in a washing-machine: clothes do not resist actively against the effort to wash them. So, let us examine the matter to establish if it works and let us not consider for now the importance of this fact, that is a comparative question. And what we discover is that a system of attack in depth, the FOFA, now accepted by the Alliance, or any other system of attack in depth considered up to now (except for attacks against fixed targets that now I will not take into consideration), is a chain system. Some sensors observe the operative

theatre and choose potential targets; then there are some subsystems of transmission from those sensors to the command and decision centres, where photographs, infrared returns, electronic emanations etc. are studied; then there are subsystems of transmission from the command centre to the missile park or the air force base; then there are primary missiles, flying in the targets' general direction; then these primary missiles have to launch submissiles (it is better to surrender instead of attacking a tank with a primary missile from West Germany to Poland, since it would be too expensive); submissiles must also have a terminal sensor to find the target again.

In other words, a system such as

the FOFA is consecutive: many things have to work and each of them according to a precise sequence. Now the FOFA technology has many automatisms that try to defeat the environment where war takes place. But if the enemy is able to neutralize just an element of the FOFA chain, the whole system becomes neutralized.

If the enemy is able to attack the initial sensors or to confuse them; if he is able to confuse the command centre with simulations, or to attack it with commandos; if he is able to attack the missile park or to intercept flying missiles; if he is able to confuse the terminal sensors; if he is able to do just one of these things, the enemy wins.

It is clear that a FOFA system if

The difference between a military system and a civilian system is that a military system must work in a place where there is an intelligent enemy who does not want it to work.

used against a few, ships, big metal targets over the surface of the sea, rather than against thousands of tanks, could work very well.

I do not want to criticize the FOFA system because it is an example of a military non-nuclear project, that should be suitable for this period of post-nuclear transition; such a pattern could be successful if we consider just fixed targets. But the way it was accepted by the Alliance is not right, since there was not a real military analysis.

The second example I would like to examine is the possibility of using autonomous attack aircraft. If we want to examine matters concerning tactical air forces, the easiest way to do it, is to consider two criteria: one is the clearness of targets (their stability, if they can be seen, and their ambiguousness, if they are mobile, etc.) and the other is the level of air defence. Let us start with very clear targets where the level of air defence is very low: for example an attack against a secondary runway located deep inside the enemy territory.

This target is very clear: a runway is not easily hidden, it is not mobile, it is stable, one cannot easily get confused. The air defence on the spot is very light; since in the list of importance this base is number three hundred, the final defence is very weak. We can say that this is an easy target, therefore it can be attacked choosing, among all arms, the cheapest ones. In this case it is possible to choose a simple bombing aircraft with a pilot.

Let us consider now the case of a very clear target where the air defence is very strong, let us say an important air force base. The enemy can rely on strong air defence on the spot, but the target is stable and we know where it is. Also in this case the classical air attack with a piloted aircraft is possible, since electronic countermeasures can be used in a rational way. The location of the base and of radar and defensive systems is known. So it is possible to plan an action, that is: to neutralize this, to attack that, to avoid something else. In this case it is possible to use an aircraft such as the "Tornado". But the ballistic missile is more advanced: it can find the fixed target, and is not much vulnerable to air defence.

The third one is not a clear target, for example moving troops, but air defence is very weak. In this case the problem is to detect the target, but this is not dangerous since air defence is very weak. So we need a slow aircraft, full of eyes: that is the helicopter. In those cases in which the target is not clear but air defence is weak the helicopter is very suitable.

The last example regards cases in which the targets are not clear, but air defence is very strong, for instance troops moving just behind the front, tanks, armoured infantry, self-propelled artillery moving amid the smoke and darkness of the battle and protected by a strong field air defence.

In this case it is not possible to use helicopters because they would

be shot down; it is impossible to use penetration bombers, because it is not possible to plan inlet and outlet, since the location of the target is unknown, and without realizing where the air defence is, it is impossible to avoid it. Only autonomous attack systems can be successful.

The division of tasks among the non-piloted aircraft, helicopter, jet aircraft and ballistic missile is necessary to utilize the new technology fully.

But this division of tasks has not even been started. So, it happens that the Army buys helicopters, the Air Force wants aircraft with seats for pilots and the non-piloted automatic attack aircraft is still a prototype because it is not taken seriously and examined carefully.

The ballistic missile is criticized because it looks like the nuclear, even if it is not nuclear. This way we do not make use of technology.

One of the main adjustments necessary in a post-nuclear age is to use technology. Today there is a lot to do. It could be enough to think of our maintenance centres in Germany. They are very big and centralized in order to save on the most sophisticated equipment, and this is perfect in a nuclear time, when there is no war, but is very lethal in case of non-nuclear bombing.

The non-use of the most useful technologies, too much centralized infrastructures, too much symbolic training, inadequate ammunition stocks, the lack of anti-tank barriers in Germany and other things are the result of nuclear "assumptions" that it is necessary to change now that we are going towards a post-nuclear period.

To change these things is very difficult: it is necessary to change outlook, and not only to spend money. But at least it is necessary to start doing so, unless we find a way to restore the credibility of the nuclear power, against those trends trying to decrease its value.

Edward N. Luttwak



WOMEN'S MILITARY SERVICE SEEN FROM THE POINT OF VIEW OF MILITARY MEN

As a preliminary statement to what follows — also in order to draw a picture of the analysis to be carried out — it seems necessary to explain some, maybe obvious, considerations, that in any case it is better to clear in advance, in order to come to the point immediately.

The first consideration is the fact, now quite known, that women already took part actively in many

war operations, both during World War II and later in other conflicts. In particular, as regards World War II, their participation was of many kinds: organization in combat units, made up completely by women (battalions employed on the Russian front and lined up by the Soviet Army); employment in the auxiliary female Corps with support and medical tasks (United States and

Great Britain); frequently direct, but more often, indirect collaboration supplied by the partisan groups. During the following conflicts, on the contrary, above all the Arabian-Israeli wars and the Vietnam war, women carried out mainly support activities. In any case, women were employed at almost all levels of the military hierarchy.

The second consideration concerns

the normative sector. Nowadays women legitimately participate in the field of defence in the Armed Forces of many States, both western and eastern. Also this is a proof that the principle of juridical equality between man and woman in all social fields is developing.

In particular, as concerns Italy, the basic law (n. 903 of 9 December 1977), in stating the above mentioned principle, refers to other ordinary laws the definition and regulations about the admission of women to the military world, that, up to now, has always been historically closed to them.

In other words, the presence of women in military organisms, both at wartime and at peacetime, is now a firm assumption.

AN OUTLINE OF FOREIGN ARMIES

Before going on, it would be interesting to examine the situation of those armies already including women among thier components. There are two systems of recruitment: voluntary service and compulsory conscription. The latter is adopted only by China and Israel.

Also the employment policy is different: the first form is the mixed one, according to which women operate in the same Bodies as men to and are destined to the same or similar assignments; the second form is the autonomous one, that utilizes women in separate Corps and employs them in specific sectors.

Also as concerns assignments, there are two methods: one allowing the admittance of female soldiers to all specialties (Officers, Non-Commissioned Officers and Enlisted); and the other limiting their admittance only to Cadres (Officers and non-commissioned officers; Officers only; Non-Commissioned Officers only).

Then, as concerns training, almost all Countries follow methods aiming at employing the same pro-

cedure used for male soldiers assigned to the same specialties.

The last comparison to be pointed out is that concerning the sectors of employment. Except for Israel, that uses female soldiers in all those assignments considered for men only, and the Federal Republic of Germany that limits their employment to the Health sector, some Countries (Norway, the Netherlands, Belgium and the United States) exclude women just from combat and dangerous roles, while all the other Countries regulated their employment generally using them in the sectors of Health, Administration, Transportations, Informatics, Technical Services, Air Surveillance, Headquarters, Commissariat and Logistic Services in general.

In short, the deep social evolution that took place during the last few decades, that made irreversible steps forward toward the emancipation of women, induced the legislators of many Countries to legitimate — together with the principle of equality between men and women and with the women's right to join public and private organisms without prejudice about the attribution of responsibility — the inclu-

sion of women in the ranks of the Armed Forces.

These meaningful innovations were, of course, also the result of social and technical reasons. Among these, very important was the progressive development of values different from the traditional ones, that has subordinated the bent for the military profession also to the remuneration, supplying this profession with its own specific attraction power. Moreover, it is necessary to consider the negative repercussions that the fall in the birth-rate has had on the number of males available to be employed in the Armed Forces. Then, we must not forget those contingent security reasons (Israel) that led to muster up all the human resources available.

MAIN THEMES OF THE FEMALE SERVICE

The equality between men and women, declared without reserve from the juridical point of view, cannot leave out the need to evaluate realistically the different psychological attitude towards professions and trades, and must not





lead to neglect different social and affective behaviours.

According to statistics, there is no doubt that, today women aim at those professions in which the occasions and opportunities of success are more numerous and that can increase social prestige: in other words, women, also because they are the last comers to the labour market, turn their attention mainly to those jobs having a high intellectual content and being a good propeller for a rapid ascent in the social scale. Some trades, postulating the possession of, even refined, psychophysical ability, but that are not satisfactory enough from the intellectual point of view, are generally neglected or underestimated, not to say ignored. We refer for example

to those handicraft activities induced by the manufacturing and transformation industries: mechanics, blacksmiths, plumbers, carpenters, welders, etc.

In short, as alternative to trades, women prefer those jobs offered by the advanced tertiary sector; teaching, informatics, administration and employment even in small dimension firms, etc.

As concerns behaviour, it seems undoubted that also in the so-called post-industrial society, women try to reconcile their job with their affective interests. That is, the wish for emancipation and the spur to success hardly lead women to sacrifice or neglect their sentimental-life. And in this field women are different from men, who traditionally aim at

looking for success in business and in their profession and feel realized by this success, sacrificing sometimes to this also their private life.

If all this is not enough to stress the differences in attitudes and behaviours with respect to the social life, there is still to consider the main difference: the psycho-behavioural problems caused by procreation and the basic peculiarities of the status and role determined by it. Someone could also maintain that in the mononuclear family of the post-modern society it seems necessary to reexamine and re-establish the roles that men and women perform inside the family, in their double function of income-producers and children's educators. Yet, the consideration of the dif-

ferent and deep involvement that, of course, reflects itself also in the field of interests and attitudes within the social and working life is undisputed.

About this matter, it could be quite interesting to stress another problem concerning the labour world. The fact that in mixed surroundings there have always existed and still exist insuperable conflicts — sometimes marked and open, and sometimes less marked, but always present — between men and women, both aiming at obtaining leadership positions, is now a too firm opinion and cannot be easily changed. It is also quite obvious, that man, even the most open-minded and easy-going, can accept being subjected to a woman only in case he can recognize in her unquestionable abilities and provided that she obtained that position by going the same way and overcoming the same obstacles he was not able to overcome. Otherwise, it's not difficult to understand that man refuses this subordination or, if he cannot do anything else, he dissociates from his subordinate tasks releasing from the relative duties.

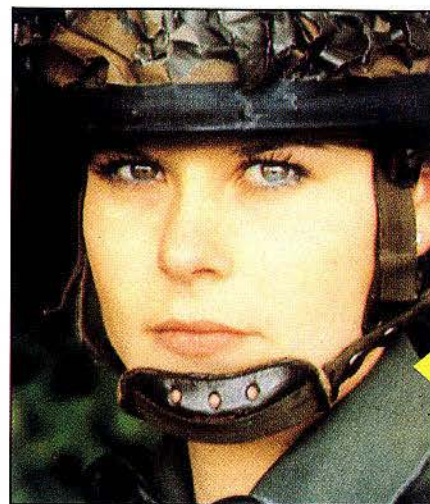
About this matter it is possible to ask oneself two questions, without venturing any answer. First of all: which negative repercussions and consequences would such a kind of situation have on the military milieu, where the principle of hierarchic subjection, rather than the principle of authority, is much stronger and compulsory than in any other milieu?

Secondly, how could the principle of discipline operate, principle that — even if the precept of "quick and absolute" obedience has been abolished definitively for a long time — is always based on the guarantee of active, responsible and complete participation of the subordinate in the achievement of the goals established by the superordinate superior? In other words, how can the couple female-Commander-male subordinate be considered in the military milieu?

POSSIBILITIES OF EMPLOYMENT

Leaving temporarily a certain perplexity, that could arise from what said above, out of consideration, it is clear that a precise determination of the employment possibilities for women in the military organism, has to consider the experience lived by other armies. In short, these experiences can be summarized in some axioms. The first is that in wartime women operate without substantial limitations with respect to men, except for those tightly linked to their own specific psycho-physical qualities and characteristics. The second axiom is that women, in peacetime, are attracted by this profession in a different way from men. In other words, they devote to it, not with less enthusiasm than men, but with a rush, partly repressed by their propensity to reconcile duties with the needs of their private life. Then, the relationships between men and women, that in the working sphere are potentially conflicting, do not adapt rapidly and could not fit perfectly the canons of subordination, if the latter were not accurately harmonized with the team spirit. Such spirit seems to exclude that the leadership can be exercised by someone who does not come from the team. It comes out that, in a military milieu, a woman could of course exercise commanding functions, but only within a body made up by women only or mixed. Otherwise (all male subordinates), this leadership could be contested, if not refused.

So, the previous considerations would persuade to avoid women's admission to the roles of the Armed Forces, and to recruit them just as volunteers and just for the Officer and Non-Commissioned Officer specialties. In other words, a full enforcement of the constitutional regulation and the fundamental respect of the juridical equality and of the relative rights-duties



should lead the legislator to establish for women the same system in force for men: compulsory (or voluntary or mixed) conscription. Moreover, psychological and functional bonds to be harmonized should lead, also in peacetime, to the employment of men and women in the same positions (except for those forbidden by psycho-aptitude and psycho-physical reasons), in the same units and in the same sectors. But how is it possible to harmonize women's bent and aspiration after jobs having mainly technological and intellectual content and the need to assign them the same tasks established for men, above all those concerning some specific trades? So, how is it possible to expect a military woman to be a mechanic, a blacksmith a welder etc., or be employed in those activities where physical performance is important, if, in civilian life, she ignores or excludes such jobs?

So, the problem of military assignments for female soldiers represents the main issue for their admission to the military service. As already experienced by other armies, that preceded us in this attempt, there would be no problem in employing them in the sectors of Administration, Commissariat, Health, Technical Services, in which



they could perform those duties they already proved fit for, sometimes in a pre-eminent way, in civilian life. Especially if the above-mentioned sectors will increase the utilization of high-tech equipment and will adopt automatized systems. In any case, the above mentioned alternative couldn't be avoided: their admission to these sectors would lead to substitute men, employing women only, or to admit them to all categories (Officers, Non-Commissioned Officers and Enlisted), starting a mixed composition of those Bodies being part of them.

The reasoning becomes more articulated as concerns Fighting Arms and Motorized Corps. It seems there should be no big preclusions to the employment in the Transmission Arms, since the employment of

women in the various station or field systems would lead them to operate within Headquarters or isolated elementary organizations, being located at a certain distance from the firing line. Some fundamental problems could, on the contrary, arise about their admission to the Engineer Corps and the Motorized Corps. In the former, in fact, woman would be asked to perform tasks characterized by a strong psycho-physical component or being seriously dangerous (use of explosives) requiring a certain trade experience she lacks (mechanic, carpenter, plumber, road machinery operator, etc.). As concerns admission to the Motorized Corps, possibilities of employment involving the driving of vehicles and the receipt and distribution of materials could be even accepted; but, of

course, those jobs involving repair (workshops, RR platoons, etc.), should be precluded or forbidden to them.

Also within the Artillery there are numerous assignments, carried out in the sphere of Commanding Positions, that could be performed by women. Many perplexities could, in any case, arise about their employment in particularly heavy assignments (bullet givers, loaders, etc.) at the lines of the field or self-propelled batteries, not to say the mountain batteries.

Doubts are hardly dispelled, if we consider the Infantry. The components of the relative units move, in fact, by combat vehicles that could be driven (or piloted) even by a woman, but will never lose their characteristic of foot fighters, who get near the target, advancing



"weapons in hand" and braving the enemy fire.

CONCLUSION

In conclusion, it seems that the previous analysis revealed a sure thing, showed a trend and posed some questions.

The sure thing is that for many decades, above all in wartime, the Armed Forces have not been a sector open to men only any more. In future, women will fight at their side more and more often.

The trend is to aim, in the future, at recruiting women trying to establish mixed bodies and units. So, the goal to be achieved should be their admission to all specialties (Officers, Non-Commissioned Officers and Enlisted), on a compulsory basis

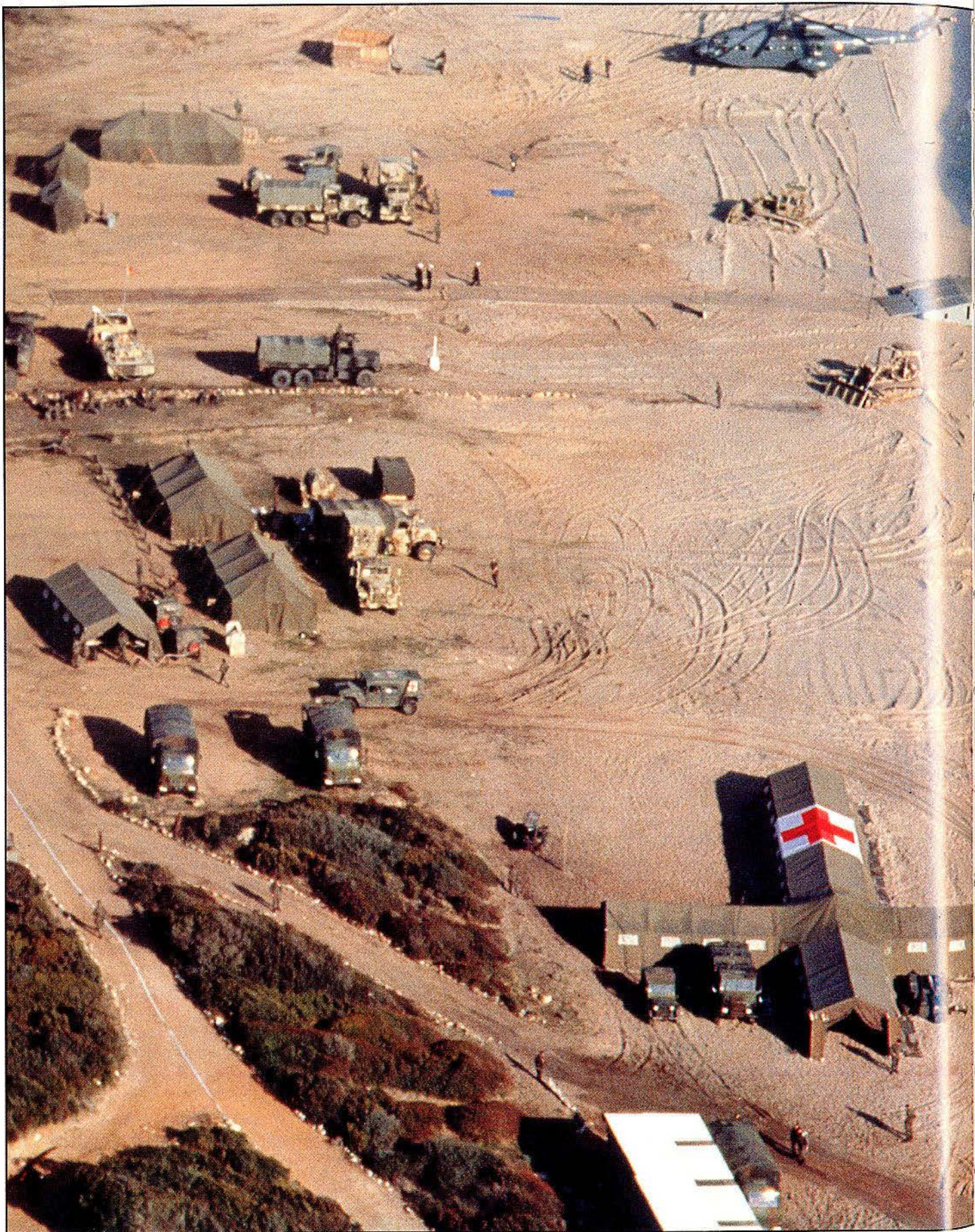
if possible, or voluntary if necessary, but for an employment in units and bodies now made up by men only.

The questions can be summarized as follows: will women, also in peacetime, guarantee the Armed Forces (that to be efficient and able to intervene quickly have to rely on them) their complete availability (24 hours), even if because of this they have to sacrifice their own or family interests?

So, from this point of view, are those legislative measures, aiming at admitting women to the military world just as volunteers and for Officers and NCO specialties, right? The answer seems to be obvious. If these measures represented the definitive solution, maybe they should be considered limitative. On the contrary, if they aimed at constituting an intermediate step, at get-

ting more experience for a following innovation of the military service, that in Italy would be in any case revolutionary, they could be accepted. This in the firm conviction that women's admission to the Armed Forces would of course represent an important step forward, but also a source of problems, partly foreseeable (infrastructures, regulations, employment etc.) and partly unforeseeable (psychological impact, behaviours, disciplinary attitudes etc.). So, this change should take place gradually and on the basis of experiences, to be carefully and cautiously examined. The goal of the above-mentioned legislative measures could be to reconcile the need of gradualness with the progressive acquisition of the above-cited indispensable experience.

Gen. Francesco Cervoni



AMPHIBIOUS EXERCISE PHINIA '89

Last year "Rivista Militare" dealt, in two articles, with the Force d'Action Rapide, better known as FAR, the French quick intervention force; an article described the regulations and tasks of the FAR, while the other analyzed its employment on the western front during a French-German joint exercise that in a certain way represented the starting point of that privileged relationship that was established between Paris and Bonn in the field of Defence, but not only in that.

If we talk about the FAR once more, it is because last February it was engaged in a bilateral activity with the US Navy and amphibious forces, that was characterized by a too often forgotten task: the rescue of people, above all civilian people, from a nation subject to growing internal tension, leading to a civil conflict among opposing factions. It is absolutely necessary for the US Marines to cooperate closely with the US Navy — even if it is important not to confuse the two Armed Forces! Phinia '89 instead, allowed to examine closely the deep cooperation between the forces of the Armée de terre and those of the Marine Nationale, in the name of that interforce spirit that sometimes finds obstacles, very difficult to be removed, in the bureaucratic system, in some habits and during the fixing of the budget.

Theatre of the operations of Phinia '89 was southern Corsica; a nation divided into two sectors by a line going approximatively from Propriano to Porto Vecchio was chosen, with the north-eastern sector controlled by rebels and the south-western sector under government jurisdiction, with the two factions engaged in armed actions. After having waited for some time, Washington and Paris decided to rescue their own citizens, and, on one side, asked the military authorities of the two countries to start rescue operations, and on the other the diplomatic authorities to organize assembly centres for refugees, to supply the staff with cards to check identity, and to supply the operation commander with all those data necessary to make the

Opening.

The shore of Balistra 'invaded' by all means and the base camp.

Facing page.

Pilots of the 6th DAM plan the mission before taking off from the Foch.



A Puma of the ALAT sets wounded people down on the amphibious ship "Ouragan".

whole operation as successful as possible.

Director of the manoeuvres was the Prefect of the III Maritime Region and Commander-in-Chief of the Mediterranean, Squad Vice-Admiral Duthoit, who led the operations of the 25 naval units and amphibious forces, and of the armed resistance, from the Centre Opérations Marine (COM) in Toulon, while on the sea the command was assigned to Vice-Admiral Tripier, Commander of the Naval Squad of the Mediterranean. The "diplomatic" part was assigned to the Commander of the Naval Forces in Corsica; he acted as Ambassador of France and of the United States, and since the goal was to train troops to react to unforeseen situations, he did his best to complicate the situation as much as possible, forming groups of people to be "evacuated" who before had been

"forgotten", or moving the assembly centres at the last moment.

Over the sea, the air superiority was guaranteed by the presence of two naval groups, one for each aircraft-carrier, and deployed about 150 nautical miles from the western coast of Corsica; on the French side there was the "Clémenceau" with three escort units and a squad air tanker; on the American side there was the "Roosevelt" with an escort unit. The units forming the amphibious group were 14, among which three escort units, one hospital ship, and the aircraft-carrier "Foch" camouflaged as helicopter-carrier.

Altogether 15,000 men took part in the manoeuvres and most of them were aboard the naval units, while the amphibious forces amounted to 800 men, plus about 650 "civilians" to be evacuated, and 350 French soldiers charged with simulating conflict on land. The operation started with a trial landing, according to the American habit, that in a real intervention

would, of course, take place very far from the area of operations.

So, the reconnaissance units 13ème Régiment Dragon Parachutistes and Fusiliers Marins Commandos, for France, and SEAL and Marines RECON, for the United States, landed secretly and carried out the reconnaissance of shores and of the places concerned, before the Foch and Guadalcanal started the airborne assault against the airport in Figari. The United States used the CH-46s and CH-53s of the helicopter squadron to take the Marines to Figari, while France used the Pumas of the 4th Aircraft Unit of the FAR, that carried the men of the 2ème Régiment Etranger d'Infanterie, that with the 1er Régiment Etranger de Cavalerie made up the main body of the French landing parties; these two units depend on the 6ème Division Légère Blindée, belonging to the FAR. The following morning the landing of the two above-mentioned units and of the French amphibious ship Orage started; the legionaries of the 1st

REC landed with their AMX-10 RCs flanked by the VABs 4x4 of the 2nd REI, while the Marines landed with the tracked vehicles LVTP-7 and the new LAV-25. The landing took place on the shore of Balistra, in south-eastern Corsica, that according to the scenario of the exercise was, of course, in the sector controlled by the loyalists. So, practically, there was no resistance and legionaries and Marines advanced quickly, obtaining the control of a large beachhead, while being under the protective covering of the air force aboard.

In this connection, it is necessary to recall that during such an operation it is very important not to leave hostages, either civilian or military, and this influences air missions from many points of view; in fact, these must head to the sea, and not come from the sea, so that the pilot of an eventually hit aircraft is not forced to eject on land, running the risk of falling into the enemy area and being imprisoned.

Such procedure was carried out by the Americans on the occasion of the raid over Tripoli; even if a landing from the sea would have been tactically easier.

The following stage was the organization of three main assembly areas, inside the territory, supported by medical centres; on the shore they organized the main evacuation centre. Upon instruction of the command that is in contact with the diplomatic authorities, the landed military men advanced, either by ordinary way or by helicopter, up to the fugitives' assembly areas; in a troubled situation the diplomatic authorities cannot guarantee absolute precision, so the Admiral knows the number of people to be evacuated with approximation of 20%, and the command chain must take this variable into consideration when establishing the means to send for the rescue. Just thirty assembly centres, over fifty that had been established, were used. Patrols escorted the people to be evacuated to one of the three main centres; it is necessary not to forget that,

even if most of the assembly centres were on the loyalist-controlled territory, the situation was tense. The main assembly centres carried out a first selection of the people, according to their nationality and state of health. Seriously wounded people were sent immediately from the first-aid post to the base on the shore, where two medical centres were located, one was American and the other of the air transportable medical unit of the French 6th DLB. The fugitives' luggage was checked a first time, in order to avoid for some bomb-parcel to jeopardize security.

Some other assembly centres were on the rebel-controlled territory, and in the area of Punta della Chiappa six hostages were taken. Both French and American reconnaissance forces and specialist groups took part in the freeing operation called "Tulipe". Main task of these men was to avoid any harm to the hostages, but they had also to intervene having a precise time limit, since all hostages had to be freed before the end of the re-embarkation of the forces. The area was "sterilized", the same way it would happen in a real operation, avoiding any in-

terference from other friendly forces. This operation was carried out by the specialists of the 13ème Régiment Dragon Parachutistes, the Fusiliers Marins Commandos, the American SEAL and maybe other units that do not love publicity very much.

The French and the Americans were assigned different rescue areas, so even if at the main assembly centres the evacuated people were divided according to their nationality, the base on the shore often received people of both nationalities, since they tried to make use as much as possible of the space available on the means of transportation. This place was much wietter than the previous one, since it lay on a safe enough territory. At the base the evacuated people and their luggage underwent a new search. The camp's perimeter was surrounded by barbed wire and everyone entering had to be identified and searched. At this point, everybody took care of the refugees his same nationality, and two con-

A wounded man treated at the medical centre of the 6ème DLB before being taken aboard the ship "Rance".



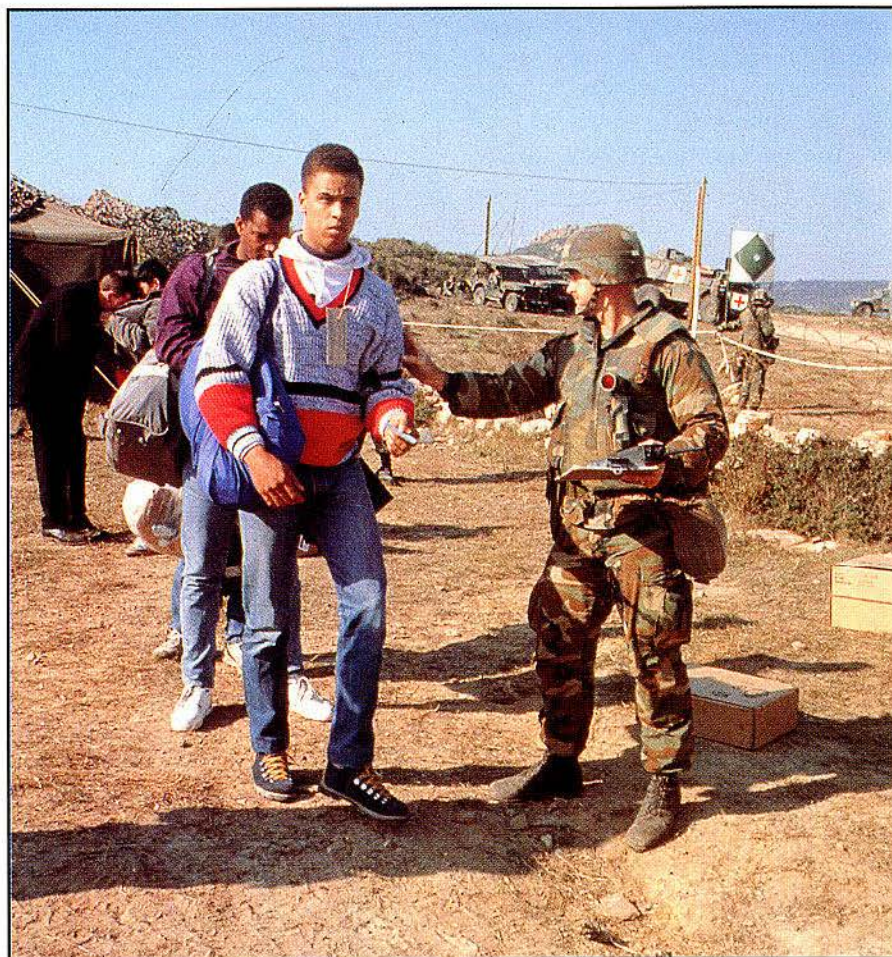


Above.

A LCAC of the US Navy. These landing crafts proved very useful to move numerous groups of refugees aboard.

Left.

American civilians being searched and checked before embarkation.



trol lines were established. After being searched, these people were checked on their identity; in many cases double or triple passports can hide terrorists, who could cause upset if taken aboard the ships. The officers of the intelligence made sure about the validity of documents and questioned those people they had doubts about. After this check, the evacuated people were taken to a waiting area, while the people refused were put under surveillance, waiting to take them inside. Wounded people underwent a similar procedure, and the medical staff checked the veracity of their state of health directly on vehicles, in order to avoid jeopardizing the security of the medical centres. There were no

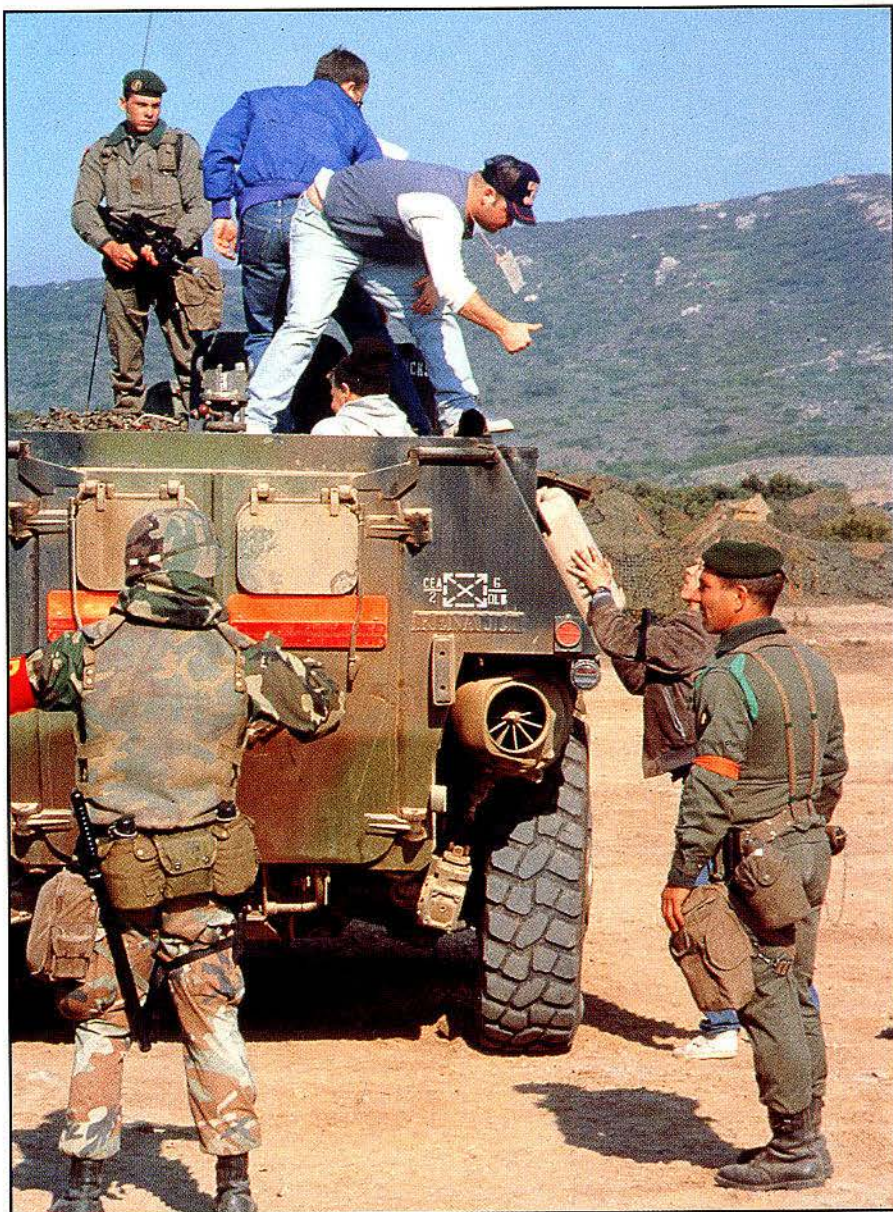
American civilian people moved under escort by a VAB of the 2ème REI, arrive at the base, under French and American' eyes.

surgical, but just sanitary structures for urgent treatments, since eventual surgical operations would have been carried out aboard the units, where the casualties were evacuated by helicopters. In this sector particularly important was the French hospital ship "Rance", containing more than 80 beds for post-surgical confinement. The healthy people were evacuated by different means, both by sea and by air. In this phase the new air-cushion landing ships of the US fleet, known as LCAC, able to evacuate 75 people at a maximum speed of 50 knots were very useful. For this reason, in many cases people were taken aboard the US units and only later moved aboard the Foch and Ouragan by helicopters.

After the rescue of more than 600 refugees, the exercise ended with the unhooking and re-embarcation of the amphibious unit.

About 730 FAR men took part in the Phinia '89, and they showed a very good integration with the naval forces, both from a logistic and operative point of view. The pilots and specialists of the 4th DAM had no problem in operating from aboard; the transport helicopters "Puma" and the armed "Gazelle", used to escort them to the enemy territory, operated for one week from the Foch, and landed and refuelled also on other units of the amphibious fleet with no problem. Also the men of the two land regiments had no problems, even if it is important to remind that these men were legionaries, very experienced servicemen.

There were no problems also as concerns the cooperation between the staff of the two nations, even if there were some visible differences: for example to control the base, the French used 40 legionaries, while the Marines 100 men. "We



observe what they do, and they observe what we do; in both systems there are right things and things that should be re-examined. We both learn", said a French officer on the Balistra shore. Combined manoeuvres of this kind allow exchange of views also as regards means. The French were enthusiastic about the already mentioned LCACs, even if some examinations are under way about some changes to reduce their noisiness, while the Americans praised the AMX-10 RCs, armed with a 105 mm cannon; originally also the wheeled vehicle

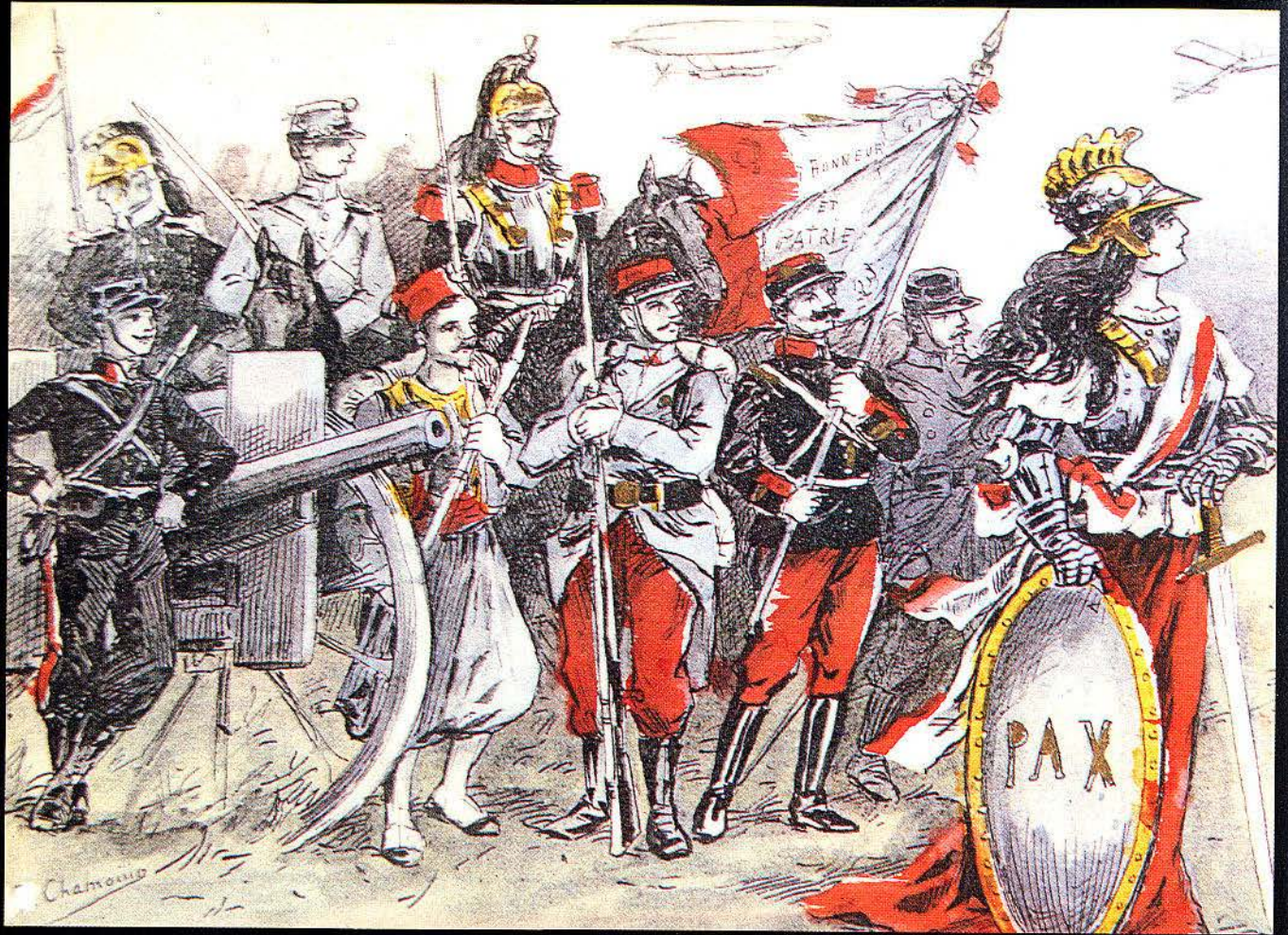
LAV was supposed to be produced in the version of support with an efficient anti-tank equipment, but problems of budget caused a delay. Moreover that the LAV-25 has a very limited capacity, in comparison with the French VAB, and in a context such as Phinia '89.

Given the validity of such operations, it is hoped that in the future further manoeuvres of this kind can be carried out, possibly with the participation of other nations.

Paolo Valpolini

FRANCE AT WAR

by Rudyard Kipling



I

ON THE FRONTIER OF CIVILISATION

'It's a pretty park', said the French artillery officer. 'We've done a lot for it since the owner left. I hope he'll appreciate it when he comes back'.

The car traversed a winding drive through woods, between banks embellished with little châteaux of a rustic nature. At first, the châteaux stood their full height above ground, suggesting tea gardens in England. Farther on, they sank into the earth till, at the top of the ascent, only their solid brown roofs showed. Torn

branches drooping across the driveway, with here and there a scorched patch of undergrowth, explained the reason of their modesty.

The château that commanded these glories of forest and park sat boldly on a terrace. There was nothing wrong with it except, if one looked closely, a few scratches or dints on its white stone walls, or a neatly-drilled hole under a flight of steps. One such hole ended in an unexploded shell. 'Yes', said the officer, 'they arrive here occasionally'.

Something bellowed across the folds of the wooded hills; something grunted in reply. Something passed overhead, querulously but not without dignity. Two clear fresh barks joined the chorus, and a man mov-

ed lazily in the direction of the guns.

'Well, suppose we come and look at things a little', said the commanding officer.

AN OBSERVATION POST

There was a specimen tree — a tree worthy of such a park — the sort of tree visitors are always taken to admire. A ladder ran up it to a platform. What little wind there was swayed the tall top, and the ladder creaked like a ship's gangway. A telephone-bell tinkled fifty feet overhead. Two invisible guns spoke fervently for half a minute, and broke off like terriers choked on a leash. We climb-

ed till the topmost platform swayed sicklily beneath us. Here one found a rustic shelter, always of the tea-garden pattern, a table, a map, and a little window weathed with living branches that gave one the first view of the Devil and all his works. It was a stretch of open country, with a few sticks like old tooth brushes which had once been trees round a farm. The rest was yellow grass, barren to all appearance as the veldt.

'The grass is yellow because they have used gas here', said an officer. 'Their trenches are You can see for yourself'.

The guns in the woods began again. They seemed to have no relation to the regularly spaced bursts of smoke along a little smear in the desert earth two thousand yards away — no connection at all with the strong voices overhead coming and going. It was as impersonal as the drive of the sea along a breakwater.

Thus it went: a pause — a gathering of sound like the race of an incoming wave; then the highflung heads of breakers spouting white up the face of a groyne. Suddenly, a seventh wave broke and spread the shape of its foam like a plume overtopping all the others.

'That's one of our torpilleurs — what you call trench sweepers', said the observer among the whispering leaves.

Some one crossed the platform to consult the map with its ranges. A blistering outbreak of white smokes rose a little beyond the large plume. It was as though the tide had struck a reef out yonder.

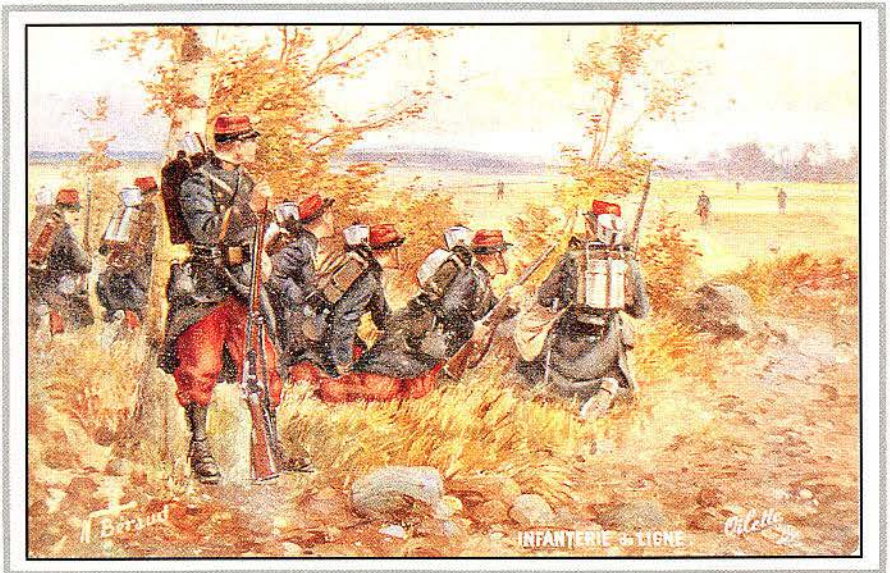
Then a new voice of tremendous volume lifted itself out of a lull that followed. Somebody laughed. Evidently the voice was known.

'That is not for us', a gunner said. 'They are being waked up from —' he named a distant French position. 'So and so is attending to them there. We go on with our usual work. Look! Another torpilleur'.

THE BARBARIAN

Again a big plume rose; and again the lighter shells broke at their appointed distances beyond it. The smoke died away on that stretch of trench, as the foam of a swell dies in the angle of a harbour wall, and broke out afresh half a mile lower down. In its apparent laziness, in its awful deliberation, and its quick spasms of wrath, it was more like the work of waves than of men; and our high platform's gentle sway and glide was exactly the motion of a ship drifting with us towards that shore.

'The usual work. Only the usual work', the officer explained. 'Sometimes it is here. Sometimes above or below us. I have been here since May'.



A little sunshine flooded the stricken landscape and made its chemical yellow look more foul. A detachment of men moved out on a road which ran towards the French trenches, and then vanished at the foot of a little rise. Other men appeared moving towards us with that concentration of purpose and bearing shown in both Armies when — dinner is at hand. They looked like people who had been digging hard.

'The same work. Always the same work!' the officer said. 'And you could walk from here to the sea or to Switzerland in that ditch — and you'd find the same work going on everywhere. It isn't war'.

'It's better than that', said another. 'It's the eating up of a people. They come and they fill the trenches and they die, and they die; and they send more and *those* die. We do the same, of course, but — look!'

He pointed to the large deliberate smoke heads renewing themselves along that yellowed beach. 'That is the frontier of civilisation. They have all civilisation against them — those brutes yonder. It's not the local victories of the old wars that we're after. It's the barbarian — all the barbarian. Now, you've seen the whole thing in little. Come and look at our children'.

SOLDIERS IN CAVES

We left that tall tree whose fruits are death ripened and distributed at the tingle of small bells. The observer returned to his maps and calculations; the telephone boy stiffened up beside his exchange as the amateurs went out of his life. Some one called down through the branches to ask who was attending to Belial, let us say,



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GRAND CROIX DE LA LÉGION D'HONNEUR

for I could not catch the gun's name. It seemed to belong to that terrific new voice which had lifted itself for the second or third time. It appeared from the reply that if Belial talked too long he would be dealt with from another point miles away.

The troops we came down to see were at rest in a chain of caves which had begun life as quarries and had been fitted up by the army for its own uses. There were underground corridors, antechambers, rotundas, and ventilating shafts with a bewildering play of cross lights, so that wherever you looked you saw Goya's pictures of men at arms.

Every soldier has some of the old maid in him, and rejoices in all the little gadgets and devices of his own invention. Death and wounding come by nature, but to lie dry, sleep soft, and keep yourself clean by forethought and contrivance is art; and in

all things the Frenchman is gloriously an artist.

Moreover, the French officers seem as mother keen on their men as their men are brother fond of them. Maybe the possessive form of address: 'Mon général', 'mon capitaine', helps the idea, which our men cloak in other and curter phrases. And those soldiers, like ours, had been welded for months in one furnace. As an officer said: 'Half our orders now need not be given. Experience makes us think together'. I believe, too, that if a French private has an idea — and they are full of ideas — it reaches his C.O. quicker than it does with us.

THE SENTINEL HOUNDS

The overwhelming impression was the

brilliant health and vitality of these men and the quality of their breeding. While they bore themselves with swing and rampant delight in life, their voices as they talked in the side caverns among the stands of arms were the controlled voices of civilisation. Yet, as the lights pierced the gloom they looked like bandits dividing the spoil. One picture, though far from war, stays with me. A perfectly built, dark skinned young giant had peeled himself out of his blue coat and had brought it down with a swish upon the shoulder of a half stripped comrade who was kneeling at his feet busy with some footgear. They stood against a background of semiluminous blue haze, through which glimmered a pile of coppery straw half covered by a red blanket. By divine accident of light and pose it was St. Martin giving his cloak to the beggar. There were scores of pictures in these galleries — notably a rock hewn chapel where the red of the cross on the rough canvas altar cloth glowed like a ruby. Farther inside the caves we found a row of little rock out kennels, each inhabited by one wise, silent dog. Their duties begin at night with the sentinels and listening posts. 'And believe me', said a proud instructor, 'my fellow here knows the difference between the noise of our shells and the Boche shells'.

When we came out into the open again there were good opportunities for this study. Voices and wings met and passed in the air, and, perhaps, one strong young tree had not been bending quite so far across the picturesque park drive when we first went that way.

'Oh, yes', said an officer, 'shells have to fall somewhere, and', he added with fine toleration, 'it is, after all, against us that the Boche directs them. But come you and look at my dug out. It's the most superior of all possible dug outs'.

'No. Come and look at our mess. It's the Ritz of these parts'. And they joyously told how they had got, or procured, the various fittings and the elegancies, while hands stretched out of the gloom to shake, and men nodded welcome and greeting all through that cheery brotherhood in the woods.

WORK IN THE FIELDS

The voices and the wings were still busy after lunch, when the car slipped past the tea houses in the drive, and came into a country where women and children worked among the crops. There were large raw shell holes by the wayside or in the midst of fields, and often a cottage or a villa had been smashed as a bonnet box is smashed by an umbrella. That must be part of Belial's work when he bellows so

truculently among the hills to the north.

We were looking for a town that lives under shell fire. The regular road to it was reported unhealthy — not that the women and children seemed to care. We took byways of which certain exposed heights and corners were lightly blinded by wind brakes of dried tree tops. Here the shell holes were rather thick on the ground. But the women and the children and the old men went on with their work with the cattle and the crops; and where a house had been broken by shells, the rubbish was collected in a neat pile, and where a room or two still remained usable, it was inhabited, and the tattered window curtains fluttered as proudly as any flag. And time was when I used to denounce young France because it tried to kill itself beneath my car wheels; and the fat old women who crossed roads without warning; and the specially deaf old men who slept in carts on the wrong side of the road! Now, I could take off my hat to every single soul of them, but that one cannot traverse a whole land bareheaded. The nearer we came to our town the fewer were the people, till at last we halted in a well built suburb of paved streets where there was no life at all...

A WRECKED TOWN

The stillness was as terrible as the spread of the quick busy weeds between the paving stones; the air smelt of pounded mortar and crushed stone; the sound of a foot-fall echoed like the drop of a pebble in a well. At first the horror of wrecked apartment houses and big shops laid open makes one waste energy in anger. It is not seemly that rooms should be torn out of the sides of buildings as one tears the soft heart out of English bread; that villa roofs should lie across iron gates of private garages, or that drawing room doors should flap alone and disconnected between two emptinesses of twisted girders. The eye wearies of the repeated pattern that burst shells make on stone walls, as the mouth sickens of the taste of mortar and charred timber. One quarter of the place had been shelled nearly level; the facades of the houses stood doorless, roofless, and windowless like stage scenery. This was near the cathedral, which is always a favourite mark for the heathen. They had gashed and ripped the sides of the cathedral itself, so that the birds flew in and out at will; they had smashed holes in the roof; knocked huge cantles out of the buttresses, and pitted and starred the paved square outside. They were at work, too, that very afternoon, though I do not think the cathedral was their objective for the moment. We walked to and from in the silence of the streets and beneath the



whirring wings overhead. Presently, a young woman, keeping to the wall, crossed a corner. An old woman opened a shutter (how it jarred!), and spoke to her. The silence closed again, but it seemed to me that I heard a sound of singing — the sort of chant one hears in nightmare-cities of voices crying from underground.

IN THE CATHEDRAL

'Nonsense', said an officer, 'who should be singing here?' We circled the cathedral again, and saw what pavement stones can do against their own city, when the shells jerk them upward. But there was singing after all — on the other side of a little door in the flank of the cathedral. We looked in, doubting, and saw at least a hundred folk, mostly women, who knelt

before the altar of an unwrecked chapel. We withdrew quietly from that holy ground, and it was not only the eyes of the French officers that filled with tears. Then there came an old, old thing with a prayer book in her hand, pattering across the square, evidently late for service.

'And who are those women?' I asked. 'Some are caretakers; people who have still little shops here. (There is one quarter where you can buy things). There are many old people, too, who will not go away. They are of the place, you see.'

'And this bombardment happens often?' I said.

'It happens always. Would you like to look at the railway station? Of course, it has not been so bombarded as the cathedral'.

We went through the gross makedness of streets without people, till we reached

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the railway station, which was very fairly knocked about, but, as my friends said, nothing like as much as the cathedral. Then we had to cross the end of a long street down which the Boche could see clearly. As one glanced up it, one perceived how the weeds, to whom men's war is the truce of God, had come back and were well established the whole length of it, watched by the perspective of open, empty windows.

II A NATION'S SPIRIT

We left that stricken but undefeated town, dodged a few miles down the roads beside which the women tended their cows, and dropped into a place on a hill where a Moroccan regiment of many ex-

periences was in billets.

They were Mohammedans bafflingly like half a dozen of our Indian frontier types, though they spoke no accessible tongue. They had, of course, turned the farm buildings where they lay into a little bit of Africa in colour and smell. They had been gassed in the north; shot over and shot down, and set up to be shelled again; and their officers talked of North African wars that we had never heard of — sultry days against long odds in the desert years ago. 'Afterwards — is it not so with you also? we get our best recruits from the tribes we have fought. These men are children. They make no trouble. They only want to go where cartridges are burnt. They are of the few races to whom fighting is pleasure'.

'And how long have you dealt with them?'

'A long time — a long time. I helped to organise the corps. I am one of those whose heart is in Africa'. He spoke slowly, almost feeling for his French words, and gave some order. I shall not forget his eyes as he turned to a huge, brown, Afredee like Mussulman hunkering down beside his accoutrements. He had two sides to his head, that bearded, burned, slow spoken officer, met and parted with in an hour.

The day closed (after an amazing interlude in the château of a dream, which was all glassy ponds, stately trees, and vistas of white and gold saloons. The proprietor was somebody's chauffeur at the front, and we drank to his excellent health) at a little village in a twilight full of the petrol of many cars and the wholesome flavour of healthy troops. There is no better guide to camp than one's own thoughtful nose; and though I poked mine everywhere, in no place then or later did it strike that vile betraying taint of underfed, unclean men. And the same with the horses.

THE LINE THAT NEVER SLEEPS

It is difficult to keep an edge after hours of fresh air and experiences; so one does not get the most from the most interesting part of the day — the dinner with the local headquarters. Here the professionals meet — the Line, the Gunners, the Intelligence with its stupefying photo plans of the enemy's trenches; the Supply; the Staff, who collect and note all things, and are very properly chaffed; and, be sure, the Interpreter, who, by force of questioning prisoners, naturally develops into a Sad-ducee. It is their little asides to each other, the slang, and the half words which, if one understood, instead of blinking drowsily at one's plate, would give the day's history in little. But tire and the difficulties of a sister (not a foreign) tongue cloud everything, and one goes to billets amid a murmur of voices, the rush of single cars through the night, the passage of bat-talions, and behind all, the echo of the deep voices calling one to the other, along the line that never sleeps.

The ridge with the scattered pines might have hidden children at play. Certainly a horse would have been quite visible, but there was no hint of guns, except a semaphore which announced that it was forbidden to pass that way, as the battery was firing. The Boches must have looked for that battery too. The ground was pitted with shell holes of all calibres some of them as fresh as mole casts in the misty damp morning others where the poppies had grown from seed to flower all through the summer.

'And where are the guns?' I demanded at last.

They were almost under one's hand, their ammunition in cellars and dug outs beside them. As far as one can make out, the 75 gun has no pet name. The bayonet is Rosalie, the virgin of Bayonne, but the 75, the watchful nurse of the trenches and little sister of the Line, seems to be always 'soixante quinze'. Even those who love her best do not insist that she is beautiful. Her merits are French — logic, directness, simplicity, and the supreme gift of 'occasionality'. She is equal to everything on the spur of the moment. One sees and studies the few appliances which make her do what she does, and one feels that any one could have invented her.

THE FAMOUS 75'S

'As a matter of fact', says a Commandant, 'anybody — or, rather, everybody — did. The general idea is after such and such a system, the patent of which had expired, and we improved it; the breech action, with slight modification, is somebody else's; the sighting is perhaps a little special; and so is the traversing, but, at bottom, it is only an assembly of variations and arrangements'.

That, of course, is all that Shakespeare ever got out of the alphabet. The French artillery make their own guns as he made his plays. It is just as simple as that.

'There is nothing going on for the moment; it's too misty' said the Commandant. (I fancy that the Boche, being, as a rule, methodical, amateurs are introduced to batteries in the Boche's intervals. At least, there are hours healthy and unhealthy, which vary with each position). 'But', the Commandant reflected a moment, 'there is a place —, and a distance. Let us say...' He gave a range.

The gun servers stood back with the bored contempt of the professional for the layman who intrudes on his mysteries. Other civilians had come that way before — had seen, and grinned, and complimented, and gone their way, leaving the gunners high up on the bleak hill-side to grill or mildew or freeze for weeks and months. Then she spoke. Her voice was higher pitched, it seemed, than ours — with a more shrewish tang to the speeding shell. Her recoil was as swift and as graceful as the shrug of a Frenchwoman's shoulders; the empty case clanged against the trail; the tops of two or three pines fifty yards away nodded knowingly to each other, though there was no wind.

'They'll be bothered down below to know the meaning of our single shot. As a rule we don't give them one dose at a time', somebody laughed.

We waited in the fragrant silence. Nothing came back from the mist that



clogged the lower grounds, though no shell of this war was ever launched with more earnest prayers that it might do hurt.

They talked about the lives of guns; what number of rounds some will stand and others will not; how soon one can make two good guns out of three spoilt ones, and what crazy luck sometimes goes with a single shot or a blind salvo.

THE REALITY OF EVIL

A shell must fall somewhere, and by the law of averages occasionally lights straight as a homing pigeon on the one spot where it can wreck most. Then earth opens for yards around, and men must be dug out — some merely breathless, who shake their ears, swear, and carry on, and others

whose souls have gone loose among terrors. These have to be dealt with as their psychology demands, and the French officer is a good psychologist. One of them said: 'Our national psychology has changed. I do not recognise it myself'.

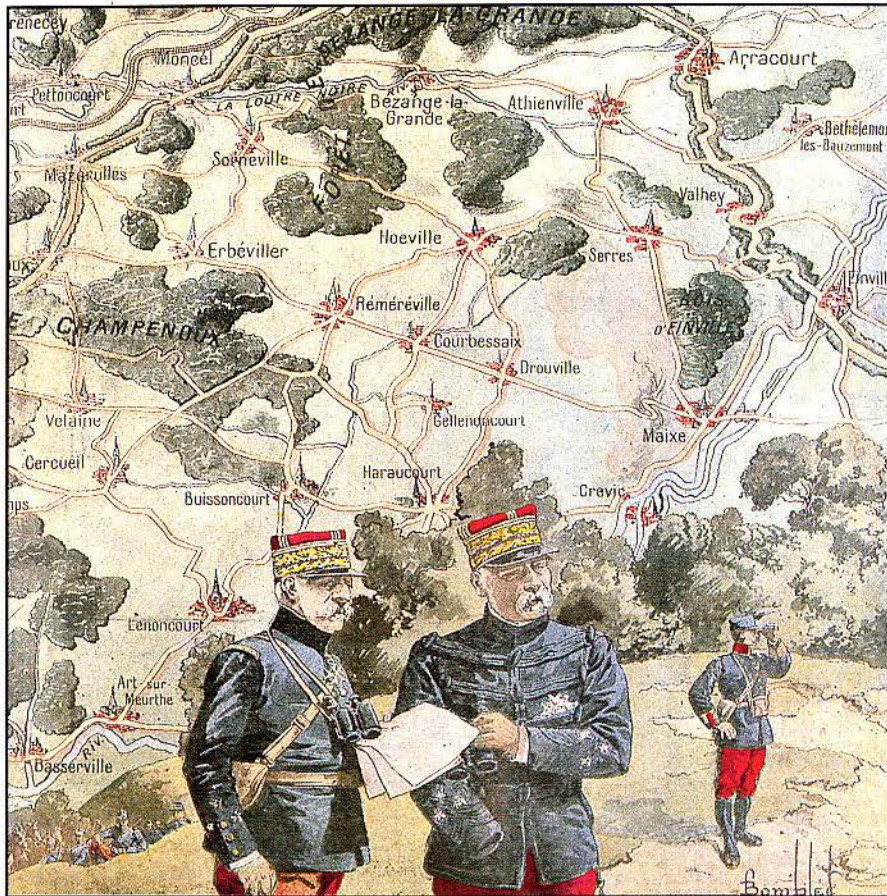
'What made the change?'

'The Boche. If he had been quiet for another twenty years the world must have been his-rotten, but all his. Now he is saving the world'.

'How?'

'Because he has shown us what Evil is. We you and I, England and the rest — had begun to doubt the existence of Evil. The Boche is saving us'.

Then we had another look at the animal in its trench — a little nearer this time than before, and quieter on account of the mist. Pick up the chain anywhere you please, you shall find the same observation



the curve of a cask. There they had jammed. The windows — but the record has been made, and will be kept by better hands than mine. It will last through the generation in which the Teuton is cut off from the fellowship of mankind — all the long, still years when this war of the body is at an end, and the real war begins. Rheims is but one of the altars which the heathen have put up to commemorate their own death throughout all the world. It will serve. There is a mark, well known by now, which they have left for a visible seal of their doom. When they first set the place alight some hundreds of their wounded were being tended in the Cathedral. The French saved as many as they could, but some had to be left. Among them was a major, who lay with his back against a pillar. It has been ordained that the signs of his torments should remain — an outline of both legs and half a body, printed in greasy black upon the stones. There are very many people who hope and pray that the sign will be respected at least by our children's children.

COURAGE AND FAITH

And, in the meantime, Rheims goes about what business it may have with that iron nerve and endurance and faith which is the new inheritance of France. There is agony enough when the big shells come in; there is pain and terror among the people and always fresh desecration to watch and suffer. The old men and the women and the children drink of that cup daily, and yet the bitterness does not enter into their souls. Mere words of admiration are impertinent, but the exquisite quality of the French soul has been the marvel to me throughout. They say themselves, when they talk, 'We did not know what our nation was. Frankly, we did not expect it ourselves. But the thing came, and — you see, we go on'.

Or as a woman put it more logically. 'What else can we do? Remember, we knew the Boche in '70 when you did not. We know what he has done in the last year. This is not war. It is against wild beasts that we fight. There is no arrangement possible with wild beasts'. This is the one vital point which we in England must realise. We are dealing with animals who have scientifically and philosophically removed themselves inconceivably outside civilisation. When you have heard a few — only a few — tales of their doings, you begin to understand a little. When you have seen Rheims, you understand a little more. When you have looked long enough at the faces of the women, you are inclined to think that the women will have a large say in the final judgement. They have earned it a thousand times.

post, table, map, observer, and telephonist; the same always hidden always ready guns; and the same vexed foreshore of trenches, smoking and shaking, from Switzerland to the sea. The handling of the war varies with the nature of the country, but the tools are unaltered. One looks upon them at last with the same weariness of wonder as the eye receives from endless repetitions of Egyptian hieroglyphics. A long, low profile, with a lump to one side, means the field gun and its attendant ammunition-case; a circle and slot stand for an observation-post; the trench is a bent line, studded with vertical plumes of explosion; the great guns of position, coming and going on their motors, repeat themselves as scarabs; and man himself is a small blue smudge, no larger than a foresight, crawling and creeping; or watching and running among all these terrific symbols.

THE TRAGEDY OF RHEIMS

But there is no hieroglyphic for Rheims, no blunting of the mind at the abominations committed on the cathedral there. The thing peers upward, maimed and blinded, from out of the utter wreck-age of the Archbishop's palace on the one side and dust-heaps of crumbled houses on the

other. They shelled, as they still shell it, with high explosives and with incendiary shells, so that the statues and the stonework in places are burned the colour of raw flesh. The gargoyles are smashed; statues, crockets, and spires tumbled; walls split and torn; windows thrust out and tracery obliterated. Wherever one looks at the tortured pile there is mutilation and defilement, and yet it had never more of a soul than it has to-day.

Inside — ('Cover yourselves, gentlemen', said the sacristan, 'this place is no longer consecrated') — everything is swept clear or burned out from end to end, except two candlesticks in front of the niche where Joan of Arc's image used to stand. There is a French flag there now. [And the last time I saw Rheims Cathedral was in a spring twilight, when the great west window glowed, and the only lights within were those of candles which some penitent English had lit in Joan's honour on those same candlesticks]. The high altar was covered with floor-carpet; the pavement tiles were cracked and jarred out by the rubbish that had fallen from above; the floor was gritty with dust of glass and powdered stone, little twists of leading from the windows, and iron fragments. Two great doors had been blown inwards by the blast of a shell in the Archbishop's garden, till they had bent grotesquely to



NA



NAPOLEON



Napoleon is rewarded of his victories by being appointed Consul for life by the July 1802 plebiscite.

Napoleon Bonaparte was born in the town of Ajaccio in Corsica on 15 August, 1796. Charles Bonaparte, Napoleon's father, takes him to France and makes him enter the college of Autun and the Brienne military school from where, in 1785, Napoleon departs with the rank of artillery second lieutenant.

Appointed Brigadier General at the age of 25 because of his victories against the federalists which he defeats at Avignon and Toulon, on 2 March, 1796, he is nominated chief commander of the Italian army and a month later he launches the troops under his command against the Austrians whom he defeats at Montenotte and Millesimo in mid April.

In the following conflict, which took place on the hills of Mondovi, Napoleon achieves an overwhelming victory and on the evening of 21 April he enters the city and lays it under tribute to feed the French troops.

On 7 May the French cross the river Po and enter the city of Piacenza. Strong in his military victories, Napoleon imposes the duke of Parma a very burdensome armistice by which the duke has to pay 2,000,000 lire, 20 works of art, horses and provisions.

Without further delay, on the following day, 10 May, Napoleon crosses victoriously the Lodi bridge on the Adda river and compels the Austrians to relinquish Lombardy, thus remaining master of the situation.

The Italians, tired of the Austrian yoke, welcome Napoleon as a liberator and on 15 May the French general enters Milan victoriously. He lays a tribute of 20,000,000 francs on the people of Milan and breaks all resistance by burning down the village of Binasco.

The city of Pavia refuses to surrender; Napoleon orders an assault and on 25 May defeats the resistance of that city. In reprisal the representatives of the municipal council are shot and the city is sacked.

In June, General Bonaparte announces in a message addressed to the French Directory that he has sent to France a load worth over two million francs and while he lays other tributes on the occupied territories he invades Livorno and confiscates the property of British, Russian and Austrian subjects within the toll gates of the city.

On 26 July, General Wurmser, chief commander of the Austrian army, who had replaced Baron de Beaulieu, defeated at Lodi, decides to counterattack and marches on Castiglione.

The conflict between the French and the Austrians at Castiglione ends in a ruthless defeat for Wurmser due to the strategic skill of the Napoleonic general Augerau. On 3 August the Austrians are put to flight.

Napoleon, in reprisal against the inhabitants of Casalmaggiore, who supported the Austrians, makes the inhabitants deliver the weapons and lays a tribute of one million lire and demands the betrayal of the opposition leaders who are prosecuted by the military courts established by him.

Napoleon hurries his march to benefit from the advantage given by his victories; he fights the Austrians at Rovereto and Bassano where he defeats them respectively on the 4 and 8 September.

NAPOLEON

Between 14 and 15 September, he faces the Austrians beneath the San Giorgio stronghold near Mantova; the battle marks the decisive defeat for the Austrians who lose over 50,000 men and have to barricade themselves in Mantua.

While Napoleon besieges Mantua, the anti-monarchist patriots of Reggio, Ferrara and Bologna join a League which founds the Cispadane Republic, or the republic "on this side" of the river Po.

Napoleon, taking advantage of the Duke of Mantua's delay in paying the tributes requested, declares him dethroned and temporarily draws up a treaty by which Genoa has to pay four million lire and close its harbour to British ships.

In November 1796 Austria organizes a new expedition to oppose Napoleon's advance and free Mantua from the siege to its troops. The new Austrian contingent is at the orders of General D'Alvinezy.

Between 15 and 18 November conflicts between the Austrians and the French rage; Napoleon's troops are first made to retreat. Napoleon himself then decides to take the command and lead the French to victory.

The decisive moment of the conflict is the battle near the Arcole bridge in which the French are victorious. The bridge, around which the Austrians have concentrated the bulk of the troops, is forced and the Austrians have to withdraw.

Napoleon rejoices; he writes to his wife Josephine that everything is going perfectly well, that he misses her and meanwhile he is chasing the Austrians who are attempting to reorganize themselves near Rivoli.

The decisive conflict between the Austrians and the French is held in Rivoli on 14 January, 1797; the Austrian general D'Alvinelzy is surrounded by Napoleon and Argereau and his troops are routed.

While his military conquests continue, Napoleon demands Pope Pious VI the payment of a heavy tribute which, however, the Pope does not honour. Bonaparte then declares the agreements expired and sends his Divisions commanded by general Berthier against the papal territories.

On 1 February, after a series of victorious skirmishes with small groups of resistance, Napoleon enters Bologna and militarily occupies it, obtaining the subjugation of the city.

On 2 February, taking advantage of the isolation of the Austrian garrison in Mantua due to the defeat of general D'Alvinezy in Rivoli, Napoleon massively attacks the city and obtains the surrender of general Wurmser. The path towards Vienna is wide open.

On 13 February an order given by Bonaparte compels Milan to surrender an enormous quantity of provisions to be delivered to the French contingent in Mantua. He also orders the confiscation of all properties of the Church in favour of the army.

Vienna is now Napoleon's aim; the centre of the Austrian Empire; his march continues victoriously with the success he obtains on the banks of the Tagliamento river where he routs the enemy and then directs his troops onto Trieste.

On 23 March Napoleon enters Trieste victoriously and lays a tribute of three million lire to the city, threatening to increase it by one third if payment is delayed.

While negotiations start in Leoben with the Austrian plenipotentiaries tasked with carrying out negotiations for an ar-



mistice, Napoleon occupies Venice and establishes a provisional municipal council to replace the command of the city left vacant by the Doge's flight.

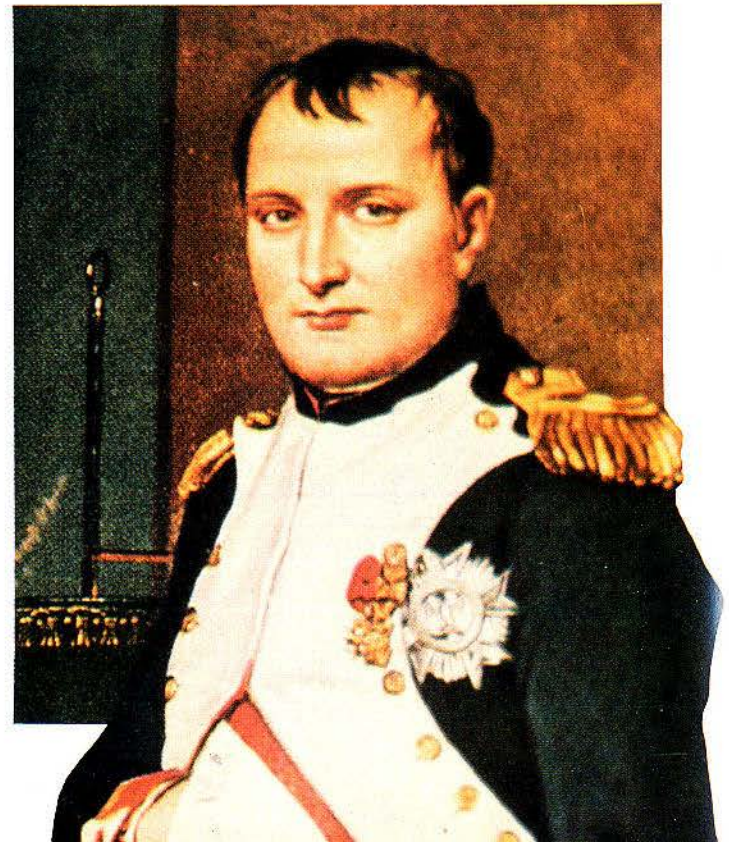
In France, among members of the Directory, governmental body of the very young Republic, the first symptoms of an opposition to Napoleon arise. His victories have made him even too popular. In a letter Bonaparte threatens an armed attack.

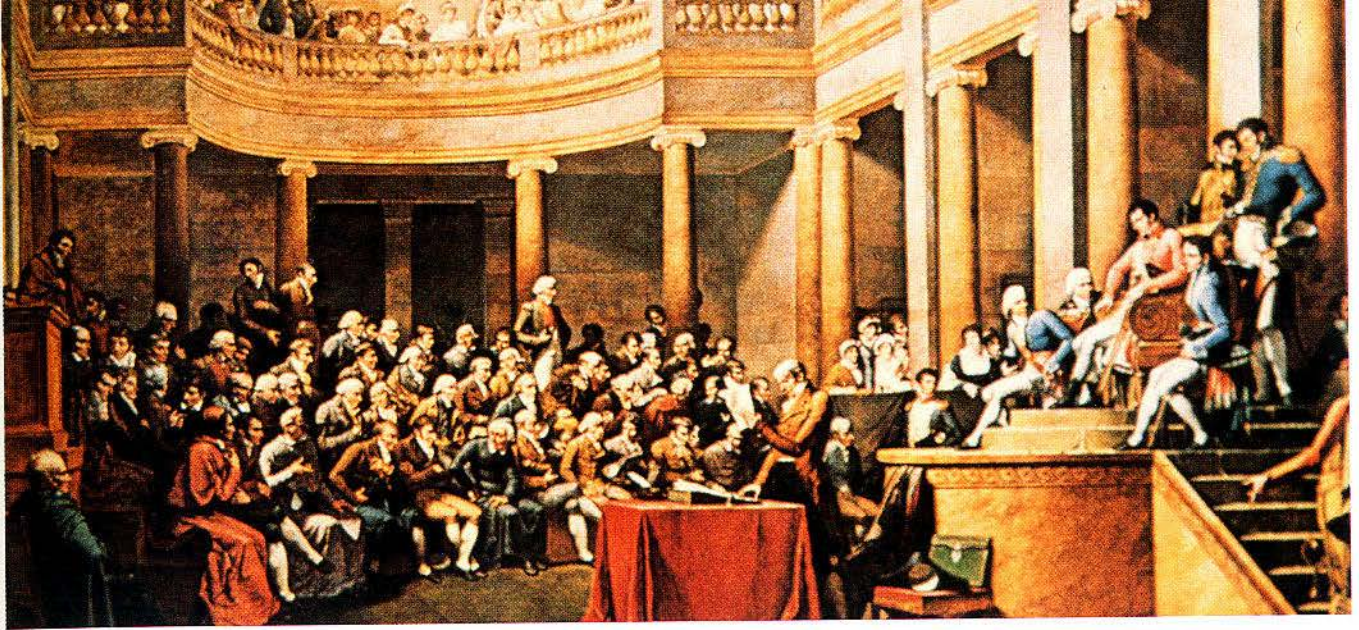
On 9 July, Napoleon proclaims the Cisalpine Republic formed by the territory of the Cispadane Republic and that of Lombardy; the new republic, ruled by a constitution similar to the French one, has its own army and its own flag. Though formally independent, the Cisalpine Republic remains in fact under French jurisdiction.

The Italian antimonarchist and republican patriots welcome the founder of the Cisalpine republic as the bearer of the new principles of liberty and equality defended by the French revolution.

The French are often welcome with a genuine enthusiasm. In Mantua, a celebration is organized in their honour.

While Napoleon negotiates with Austria, negotiations which will bring to the Treaty of Campoformio, Charles Maurice De





Talleyrand is appointed foreign minister in France. He considers Egypt, a British colony, a useful objective for France to conquer.

The signing of the Treaty of Campoformio, ratified on 18 October, 1797, marks the end of Napoleon's first Italian campaign and a disappointment for Italian patriots who see the surrender of Venice to the Austrians as a betrayal perpetrated by Napoleon against the ancient Venetian Republic.

Having ended the first of his victorious military campaigns, Napoleon leaves Italy to return to his country where a coup d'état occurred in his absence, has changed the political balances within the Directory.

Napoleon returned to France, sees an Italian geo-political situation which is completely different as a result of the French military conquests and the revolutionary and republican movements which have moved throughout the peninsula where a great number of republics are now flourishing.

Napoleon Bonaparte's return to Paris is welcome with great enthusiasm. His successes have given him great popularity and the Directory does its best to make the too popular general leave as soon as possible.

Napoleon gives his consent to a military campaign against Britain and accepts the command of the army destined to fight the British. After excluding the invasion of Britain because of the obvious sovereignty of the British Navy, Napoleon decides to start his campaign by invading Egypt, a Turkish colony more easily attacked.

The Army of the East, the French expedition force in Egypt, is created and established by a decree of the Directory of which Napoleon becomes a member to replace Lazzaro Carnot. The fleet bearing the French towards Alexandria leaves Toulon on 19 May, 1798 and, escaping British ships takes possession of Malta and lands in Alexandria on 1 July.

Napoleon occupies the town and then leaves general Kléber to organize the lines of communication and garrison the town while, at the head of the bulk of the army, he takes position on the plain lying below the pyramids.

The famous Pyramid battle is fought on 21 July, 1798; The Mamelukes, an Egyptian military rank known for its highly trained cavalry, are deployed on one side. Napoleon deploys his fusiliers and heavy artillery with a great number of gun batteries.

The Egyptian Cavalry is decimated by the accurate fire of Napoleon's fusiliers and artillerymen; the cavalry men's attack is stopped at a long distance by the fire of the French fusiliers, accurate to over 200 metres, and the Mamelukes cannot turn to a hand to hand struggle in which they are highly trained. This victory opens Napoleon's path to Cairo.

Napoleon reaches Cairo on 25 July and orders the inhabitants

Above, on the left page.

Together with the allies Napoleon garrisons the French capital.

Above.

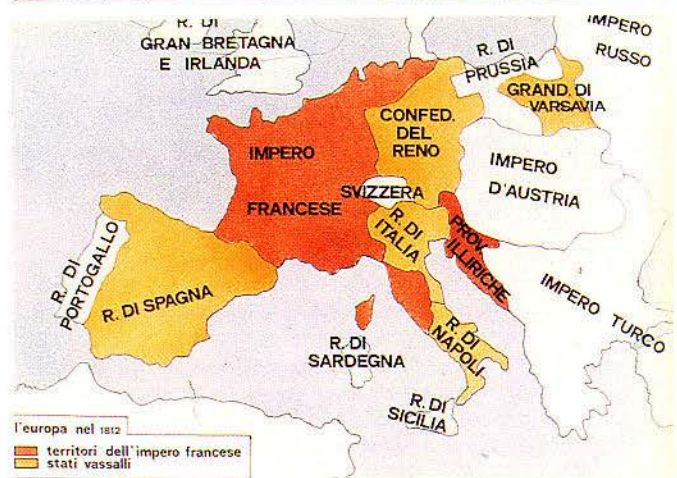
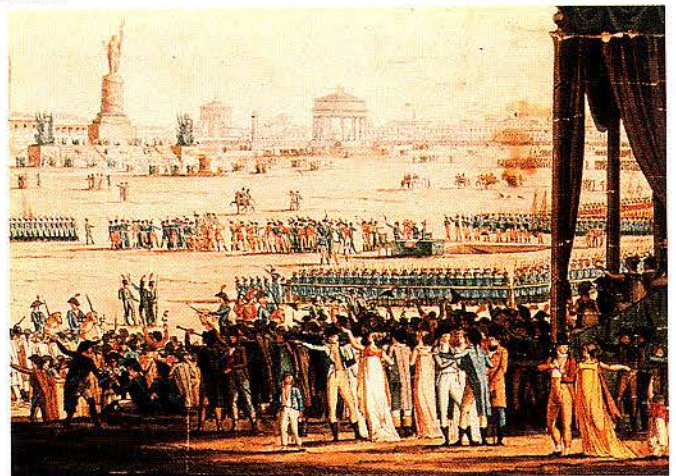
The appointment to the charge of President of the Italian Republic which Napoleon obtains on 25 January, 1802.

Below.

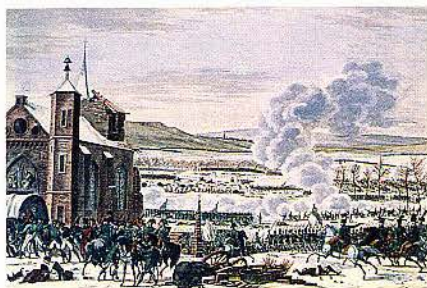
In Milan Napoleon celebrates the important victory of Marengo and the liberation of the Cisalpine Republic.

Below.

The year 1812 marks the greatest territorial expansion of the French Empire; the Emperor reigns over seventy million subjects of which little more than a third are French.



NAPOLEON



Left.

The battle of Eylau, one of the harshest that the French army has ever had to fight.

Right.

Back in France, Napoleon quickly reestablishes an army of 400,000 men and tries to stop the Prussian, Russian, German, Swedish, Austrian and British attacks.

of the city to support the troops. He stops all attempts at resisting by spectacular executions of the rebels.

From Cairo Napoleon crosses the Egyptian desert and heads for Syria and occupies Gaza and Giafa on 9 and 11 March, respectively. He continues his march to San Giovanni D'Acri which he besieges on 19 March. During the siege of the town he has to face the Egyptian troops which have gathered together at the foot of mount Tabor.

The Mount Tabor battle is the most glorious episode of the Egyptian campaign; Napoleon's army routs the Turkish and Egyptian troops achieving the most important success of the conflict. While Napoleon lifts the siege on San Giovanni D'Acri, the British fleet faces French ships at Abukir, near Alexandria.

The feared sovereignty of the British fleet is proved in all its power; the French fleet anchored at Abukir is destroyed by the British ships commanded by Admiral Horatio Nelson, while the French garrisons on land are ruthlessly bombarded from the sea. The French become isolated and are unable to communicate with their home country.

Napoleon is compelled to review his plans; the news coming from France reports on several defeats of the French army by the Austrians and the Russians. Napoleon decides to leave the army and garrison Egypt and on 22 August he leaves secretly for France; he lands in Frejus on 9 October and suddenly reaches Paris.



The Directory, whose members are divided by feuds and intrigues, is totally discredited in the eyes of French public opinion; for Napoleon, surrounded in glory, this is the best time to act. By the coup d'état of 18 Brumaire 9 Novembre, 1799 the deputies of the Directory are discharged and power is granted to three consuls, Napoleon, Sieyes and Roger-Ducos.

Just a few weeks later, Napoleon promulgates the Constitution by which power is centred within his hands, while the other two consuls detain a rectifying function; after establishing this reform in the home policy, Napoleon decides to fight the troops of the Second Coalition formed by Austria, Turkey, Britain, Russia and the Kingdom of Naples who had won the French in Italy and destroyed the republic regimes established by Napoleon in the peninsula.

In great secrecy, Bonaparte establishes the Second Army with which he later faces the troops of the Second Coalition. The Second Italian Campaign starts on 6 May, 1800.

On 9 May, the French Army is in Geneva where Napoleon lays a tribute of one million francs and demands labour in favour of his army. He then leads the army towards the Great Saint Bernard Pass.

The aim which urges Napoleon to hurry the conflict against the allies of the Second Coalition is to show the French people that the faith in their First Consul is well placed giving evidence of organizational and military efficiency.

On 20 May, only two weeks after the beginning of the Second Italian Campaign, Napoleon's army crosses the Great Saint Bernard Pass and marches into Italy, headed for Turin.

Napoleon makes his entrance in Milan on 2 June and on 9 June he fights the Austrians at Montebello where he inflicts the enemy the first defeat.

However, the highest concentration of Austrian troops, headed by the Baron of Melas, is situated in the plain of Marengo, near Alexandria. And that is exactly where the French troops are headed.

The opposing armies in Marengo number 30,000 Austrians and 28,000 French. The conflict starts at 8 o'clock in the morning and lasts for twelve hours. At 8 p.m., the Austrian army, which has undergone severe losses, takes to flight. Napoleon is the undisputed conqueror.

In Milan, Napoleon celebrates the important victory of Marengo and the liberation of the Cisalpine Republic from the Austrian presence, with formal celebrations which culminate in a great feast in the Bonaparte Forum.

While the Austrians are compelled to ask for peace and the other nations which had formed the Second Coalition withdraw from the conflict, Napoleon returns triumphantly to Paris.

On 14 July the Concorde is celebrated in Paris in the drill-grounds. Here Napoleon reviews the banners won from the enemy, surrounded by an immense popularity. Bonaparte decides to use the legislative power granted to him by his appointment as First Consul and asks a committee to draft a new Civil Code.

While the British occupy Malta, the powerful minister of the French Police, Joseph Fouché, thwarts an attempt to assassinate Napoleon, organized by Jacobin conspirators.

Napoleon, harshly contested by the Jacobin left wing and by the pro-monarchist right wing, is the objective of another attack organized by the royalists headed by George Cadoudal, emissary of Louis XVIII who, from Britain, conspired against the First Consul.

While Napoleon, preceded by the Dragoons and his following,



is going to the Opéra to attend a performance, the conspirators place a cart on his path on which there is a barrel full of powder, pullet and canon balls. In Rue Saint-Nicase, at Napoleonn's passage, the fuse is fired.

Just a few seconds before Napoleon's cab reaches the already primed bomb, the coachman stops the horse which is giving signs of restlessness; the explosion is dreadful, but Napoleon is far enough to be unharmed though over twenty people die among his following and the by passers who were on the site of the attack.

Napoleon's reaction is very harsh; he establishes special courts which sentence to deportation to the penal colony of Caienne all those opposing his regime. Those responsible for the attack are shot dead.

Britain is now alone in the war against Bonaparte and must accept to sign a peace in Amiens on 27 March, 1802.

The French welcome peace joyfully for it seems to lead to a new period of serenity for the people weary of many years of war and conflicts. Napoleon is rewarded of his victories by being appointed Consul for life by the 29 July, 1802 plebiscite.

Now comes the age of the great Napoleonic reforms during which the French dictator attempts to reach the aims of social pacification through a vast state reorganization programme and the granting of several amnesties.

Churches are re-opened and an agreement is reached with Pope Pious VII in which Napoleon acknowledges Catholicism as the established state religion and liberalizes the profession of faith by the French Catholics.

Together with the social reorganization, Napoleon gives a great input to the economy through a set of laws favouring the development of trade, economy and industry and he decides to establish the Bank of France and coin a new currency, the Germinal Franc, which circulates till 1928.

One of the salient points of foreign policy during this Napoleonic period is the charge of president of the Italian Republic which he obtains on 25 January, 1802.

The peace signed with Britain gave Napoleon the opportunity to consolidate his power and strengthen French hegemony over Europe; the British, aware that time plays in favour of the revolutionary Bonaparte, in May 1803, once again declare war. A new conspiracy by which the British and the French monarchists attempt to kidnap Napoleon is thwarted by the minister of the Police, Fouché. The conspirators were all shot dead.

In that same month of May, the Senate proclaims Napoleon Bonaparte emperor of the French; for the coronation ceremony Napoleon summons the Pope to officiate the rite which is held formally in the Notre-Dame Cathedral, on 2 December, 1804.

The new emperor must soon face the aggressiveness of the other European nations. In August 1805, Austria accepts the Anglo-Russian Pact and opens hostilities against France. Napoleon moves over 150,000 men to the frontier and on 25 September, at the head of the French army, he crosses the Rhine river to fight the Austrians.

The army deployed by Napoleon, called "la Grande Armée" is formed by about two hundred thousand men, divided into 7 army Corps.

The French army covers the 350 kilometres which separate the Rhine river from the Danube in only 13 days, moving for about 30 kilometres a day, and fight their first conflict against the Austrians at Ulm on 17 October, 1805. Austrian General Mack and his twenty-six thousand men are made prisoners by the French.

At Trafalgar, almost at the same time as the battle of Ulm, a great naval battle was being fought between the French fleet ready to invade Britain and the British ships come to bar the path of the Napoleonic navy.

NAPOLEON



Admiral Horatio Nelson commands the British navy. He is very popular and his well-known invincibility follows him throughout all the battles fought and won on many seas.

On 21 October the *Victory*, a flagship commanded by Nelson himself, gives the signal for the British fleet to attack. The latter moves against the Franco-Spanish ships commanded by Admiral Pierre de Villeneuve.

Sailing in two columns, the British squad attacks the flank of the French fleet and after several attacks they take possession of a number of French vessels.

While 20 French ships are sunk and the battle is turning in favour of the British, a shot from a French vessel strikes Admiral Horatio Nelson who dies a few hours later after hearing the news of the victory.

Though he has to relinquish his idea of invading the hated Britain, which remains absolute sovereign of the seas, Napoleon continues his land campaign and enters Vienna victoriously, fixing his abode in the royal palace of Schonbrunn, from where the Imperial family escaped after the defeat of Ulm.

On 2 December the decisive battle is fought. 90,000 men of the Austro-Russian army engage 65,000 Frenchmen on the field of Austerlitz.

The battle of Austerlitz ends in an overwhelming victory for the French who lament only 8,000 casualties while among the Austro-Russians, 15,000 men die in battle and 20,000 are made prisoners.

The victory of Austerlitz allows Napoleon to lay his terms in the Peace Treaty signed in Preburg by which France takes the political control of the German states and obtains Austria's surrender of the Veneto and Tyrol regions, while the Austrian Emperor must relinquish the title of Emperor of the Sacred Roman Empire, which ceases to exist. However, Britain's hostilities do not cease and the latter still remains the enemy to be fought.

Meanwhile Napoleon decides to overthrow the Bourbons in Naples and enthrones his brother Joseph who, in 1818, is replaced by Joachim Murat.

While the state of belligerence declared by Britain continues, Prussia becomes Napoleon's continental enemy. While Bonaparte attends the ceremony during which the first brick of the Arch of Triumph is laid, the king of Prussia gets his troops ready for the invasion of Saxonia.

On 1 October a Prussian ultimatum demands the evacuation of the French from all German territories: Napoleon's response is his advance in the direction of Saafeld where, on 10 October, he encounters the Prussian advance guard and puts it to flight while the German commander, Prince Louis of Prussia, dies in battle.

Four days later, on 14 October, the battle of Jena is fought; Napoleon himself heads the battle. Prussian casualties are very high: 20 thousand men die in battle, 30,000 are made prisoners and what remains of the army takes to flight in a disorderly manner.

The day of the battle of Jena, the French general Davout faces and puts to flight a second Prussian army near Auerstadaedt; the Prussian army is by now a complete wreck.

Napoleon continues his advance ruthlessly and takes prisoners another 14,000 Prussians in Erfurt; two days later he takes possession of the city of Halle.

From one victory to another, the French take Lypsia, Halbestadt, Wittemberg, Potsdam and on 27 October Napoleon enters Berlin.

On 28 October, Prince Hohenloe, chief commander of the Prussian army surrenders in Prenslau. The armistice between France and Prussia is signed in Charlottenburg on 16 Novembre and a month later Napoleon enters Warsaw.

The French military power on the European continent is by now decidedly established; in order to break the British resistance, Napoleon decrees the continental block; all European ports must close to British ships and no trade must be held with Britain.

The economic war carried out by Napoleon against the British aims at isolating Britain and damaging exchanges and trade to weaken internal economy and cause conflicts between the middle class and the anti-French ideology of the political class.

The British government, in reprisal for the Napoleonic decree, blocks the most important French and colonial ports with its fleet, while it signs a new alliance with Austria. The French and the Austrians fight at Eylau.

The battle of Eylau is one of the harshest that the French army has ever had to fight; Napoleon suffers severe casualties and the outcome of the battle is uncertain for a long time.

After the Eylau victory, Napoleon fights other battles which, from victory to victory, take him to the city of Danzica.

On 12 March, 1807, Napoleon orders the siege of the city of Danzica while Russia and Prussia sign a new anti-French alliance. After over two months' resistance, Danzica surrenders on 26 May.

Napoleon must now fight against the Russian army sent by the Czar Alexander. The battle between the French and the Russians

Above left.

Napoleon encounters the Austrians at Rovereto.

Above right.

On 15 May, Napoleon enters Milan as a liberator.

Below.

Napoleon, escaped from the island of Elba, heads his army and on 21 March 1815 enters Paris once again.

Opposite page, above lefts.

The manoeuvre of Napoleon's Guard celebrating the Emperor.

Centre.

The battle at the Arcole bridge where the Austrians are forced to withdraw.

Right.

The victorious conflict between French and Russians at Friedland on 14 June.





is fought in Friedland, on 14 June. Once again Napoleon is victorious; French casualties amount to 8,000 against the 25,000 Russians who die in battle.

After the Friedland victory, Napoleon meets the Czar Alexander on the Niemen river; here the two Emperors decide on the terms of the peace; Napoleon promises the Czar his help against Turkey and allows Russia to annexe Finland.

In exchange the Czar agrees on the continental block against Britain.

The division of Europe decided by the two Emperors deprives Prussia of half its territory and accepts Napoleon's policy which seems to have no rivals on the European continental territory.

France, enriched by the sack of the conquered territories, now carries out military expeditions against those countries which attempt to escape the continental block. Portugal is occupied and the conquest of Spain starts.

The great number of soldiers employed by Napoleon in the conquest of Spain soon overwhelms the small Spanish army.

On 23 March, 1808, the French enter Madrid.

Following the beaching of British General Wellington in Portugal, the inhabitants of several cities rise against the French who continuously ambush the population with the guerilla technique.

The French are forced to withdraw; for the first time a French army is defeated. This occurs in Bailen on 21 July. In August the French withdraw from Madrid and relinquish the siege of Saragozza.

Napoleon announces the establishment of a new expedition Corps

to operate in Spain; the French army, headed by General Soult, is victorious over the Anglo-Spaniards and on 4 December occupies Madrid. Spain returns under French hegemony.

The year 1812 marks the greatest territorial expansion of the French Empire; Napoleon has annexed Etruria, the Papal States, Holland and part of northern Germany. The Emperor reigns over 70 million subjects, of which only 28 million are French.

Britain, taking advantage of the increasing difficulties of the French in keeping the Spanish rebels under control, signs an alliance with Austria and drives Napoleon into another war which ends with the French victory of Wagram. In order to annexe Austria through a political manoeuvre, Napoleon, who has not had children from his wife Josephine, divorces and marries Mary Louise of Austria.

On 20 March of the following year, Mary Louise of Austria bears Napoleon a son who will ensure the descendency. On his birth, Napoleon 11 receives the title of King of Rome.

The gathering storm of a new war hovered over France; Russia refuses to respect the continental block against Britain which it deems harmful to its own commercial interests. Napoleon, at the head of an army of 700,000 men, decides to invade Russia.

The Russian army adopts a new military strategy; it engages the French in a great number of little skirmishes and withdraws to the hinterland of the country, making Napoleon leave part of his men to garrison the occupied territories. In September, when Napoleon arrives in Moscow, he finds the city ablaze.

The Napoleonic army, decimated by hunger and disease, and lack-





ing supplies, is compelled to withdraw. A Russian Cosack attack while passing the Beresine river reduces the Grande Armée to a few thousand men. The Russian Campaign turns out to be an immense military disaster.

Back in France, Napoleon quickly reestablishes an army of 400,000 men and tries to stop the Prussian, Russian, German, Swedish, Austrian and British attacks against the French. The first conflicts favour Napoleon, but the disastrous Lysia defeat allows the allies to enter Paris.

With the allies garrisoning the French capital, the Paris Senate declares Napoleon dethroned and the Bourbon monarchy is restored. Louis XVIII, brother of the decapitated sovereign, becomes king. Napoleon, subject to the conquerors' control, is sent to the island of Elba where he is confined.

Napoleon remains on the island only for one year; having learnt that in France the new king is surrounded by the people's hostility, Napoleon escapes from the island and reaches France where he heads the army which welcomes him triumphantly and on 21 March, 1815 he enters Paris once again.

This is the beginning of Napoleon's Hundred Days; he reorganizes the army to fight the allied powers which at the Congress of Vienna had defeated his Empire and restored the dethroned kings. The rendez-vous with the army of the VII coalition is at Waterloo.

At Waterloo, on 18 June, 1815, the decisive battle is fought. 89,000 French against 86,000 Anglo-Dutch and German allies. The British, headed by General Wellington, manage to join Blucher's Prussians and surround the French. It is the end of Napoleon's dream.

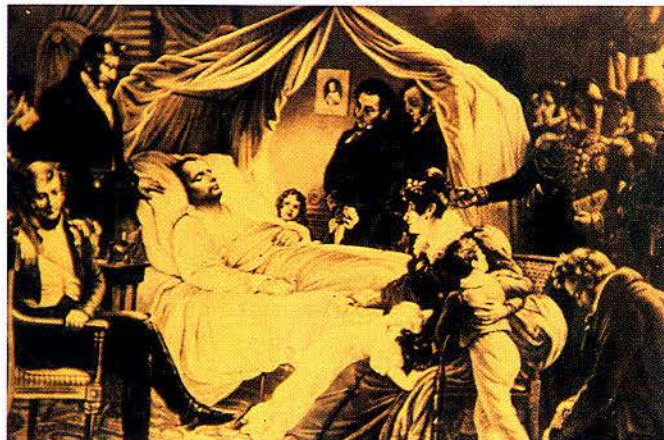
The French are drawn back by the British attacks and when they are forced to retreat they are attacked by the Prussians who turn the retreat into a ruinous withdrawal.

Back in Paris, Napoleon signs his second abdication in favour of his son, Napoleon II, and tries to take refuge abroad, but he is taken prisoner by the British who decide to confine him to the island of Saint Helena.

On board the British ship *Northumberland*, the prisoner Napoleon is transferred to the tiny island of Saint Helena, a small and arid British territory in the middle of the Atlantic ocean.

On the island, Napoleon spends his time writing his memoirs and dreaming of an impossible revival of his Empire. The British Governor Hudson Lowe, subjects him to severe surveillance which arouses the former French Emperor's wrath.

On 5 May, 1821, undermined by cancer of the stomach and without medical treatment, denied him by Governor Lowe, Napoleon dies in the camp bed which had accompanied him throughout the battles of Europe. On 15 December, 1840, his spoils were buried in the mausoleum of the Invalides in Paris.



On 5 May, 1821, in Saint Helena, Napoleon dies from cancer of the stomach, without any medical treatment.

THE FEMALE MILITARY SERVICE SEEN BY FRANCESCA GAGLIARDO DI CARPINELLO



Francesca Gagliardo di Carpinello, a painter, with four quarters of nobility, baroness of Norman origin, received us in her studio in Palermo, full of paintings, relics and ancient keepsakes, a lot of which testify the over twenty-year friendship of her family with Renato Guttuso.

Doves, interwoven hearts, framed photos; the family group and the friendly, open smile of Antonio

Francesca Gagliardo di Carpinello:
Cockfight, oil canvas cm 100x120, 1986

Marchello di Cammarata wink from the many furnishings and from the walls.

The "Gattoparda" has a very personal look: in fact, she designs her own dresses and was also elected

one of the ten most elegant ladies of the international jet-set, at the "Paride d'oro" in 1971.

In a corner of the console table a picture of Guttuso at about the age of 2, wearing shorts and a big butterfly-shaped lace collar, has the sulky look of who is forced to do something unwillingly.

We get into the real studio, to dive into the reality of her art.

Renowned critics and painters prais-



Francesca Gagliardo di Carpinello:
Summer uniform, acrylic colour on paper
cm 50x70



Francesca Gagliardo di Carpinello:
Ordinary uniform, acrylic colour on paper cm. 50x70



Francesca Gagliardo di Carpinello:
Winter uniform with variations, acrylic colour on paper cm. 50x70



Francesca Gagliardo di Carpinello:
Gala uniform: mantel, acrylic colour on paper cm. 50x70

ed her paintings, her engravings, ceramics and lithographies: the poet Yves Lecomte, asked to judge her works, defined her a "painter of great talent, oasis of truth in a desert of words".

In a sudden change of style, we are conquered by the different rhythms imposed by the colouring of her works: incisive and aggressive, delicate and essential, antinomic and typically Sicilian in revealing the conditions darkness/light, colour/non-colour, silence/scream...

The expressive neo-realism of this artist aims at extolling the pictorial values, through the liberation of the elements making up the composition from any kind of description, so to win and claim, quite rightly, originality and autonomy.

In particular, it is in works such as the compositions and the still-lives of the last period that we can notice and recognize the genuineness of this artist: these are works in which the author turns her attention to the representation of the truth, spiritualized by the introspective analysis, and in which the "focusing" of the subject finds its expression in a well-balanced play of space, freeing reality from the too great incisiveness of the image portrayed.

The stroke, sometimes, orchestrates the colour, imprisoning it in dramatically obsessive situations and rhythms, even if the artist avoids falling into violence, and the absence of emphasis shows that sense of detachment from everyday life, that blocks and annuls any form of exasperation.

The real, intimate need for this, still Mediterranean, painteress is revealed by her themes, treated, according to Vico's fantastic logic about the "perturbed and touched mind", with prickly-pears, and with the compositions or still-lives, sometimes essential in the, almost nocturnal, medley of their background. Her art aims at being the proof of the live and attentive participation of the world it is part of, revealing, without pretence and tinsel, the anxiety and passion harbouring in the most secret recess of

the mind.

Some polychrome sketches, lying on the sofa, attract our attention: they represent original and elegant women's project/uniforms, inspired by the nature of our artist. We are going to ask some inevitable questions on the matter of the female military service.

Question: Francesca Gagliardo, what do you think about a women's army, about the enlistment in the Army?

Answer: Since it is very common in many Countries, I think that women should actively participate in this and other social sectors, and, so, be "present" in the Army. Maybe it should be an optional presence, in the respect of the aptitude capacities of the individual, yet necessary as foundation of experience and integration, as well as completion of that presence in sectors, that, up to now, have been open to men only. And this not in the worse sense of the meaning, but in the sense of increase of the experience and of the possibility of supplying men and society with

the new and positive contribution of women.

But I cannot understand the look and the meaning of the female warrior: maybe because I'm romantic or too feminine; but I feel closer to that tradition presenting a strong and vigorous man as a reckless fighter.

Q. How do you imagine, as an artist and a woman, women's uniforms?

A. I imagine them having a decorous and elegant look, that is the way I quickly sketched them in the plates I'm showing you. It is always pleasant to see an elegant woman; moreover I would study and test carefully everything concerning the functionality of this clothing.

I have a lot of ideas that could lead me to make interesting proposals.

For all women it's time now to produce, to give concrete answers to the questions our age poses us, in order to give, through our presence and intelligence, that contribution of female ideas and work it requires.

Giampiero Linardi



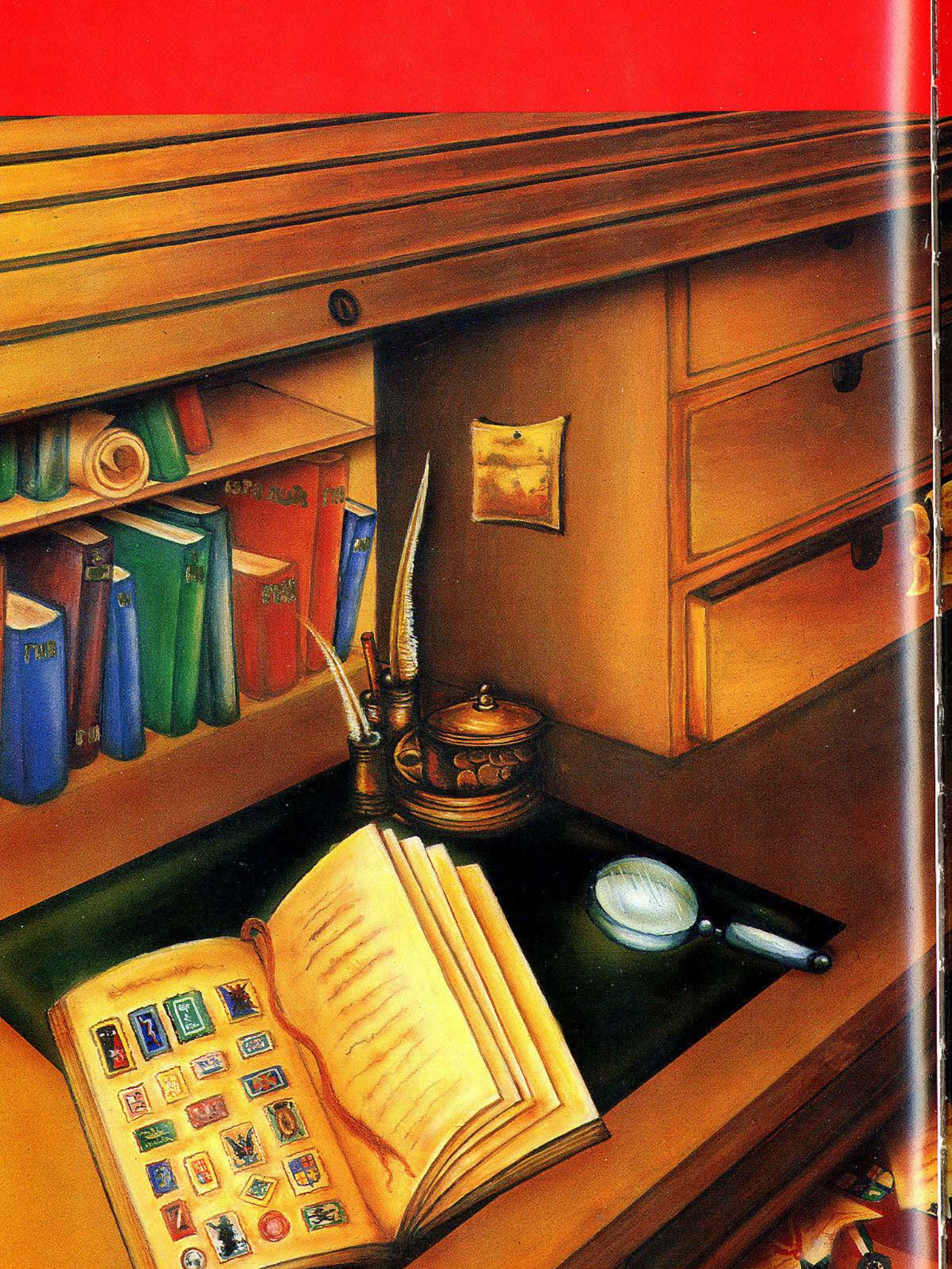
Francesca Gagliardo di Carpinello is one of the best-known painteresses of the last decade and one of the most prestigious names of contemporary art.

She was born in Palermo, where she attended the art school and then the school of fine arts and where she started her career with her first one-artist exhibition in 1967.

Well-known painters and artists wrote about her, among whom Giorgio De Chirico, Renato Guttuso, Giancarlo Vigorelli, Gioacchino Lanza Tommasi, Bruno Caruso, Maurizio Calvesi, Umberto Baldini, Tommaso Paloscia, Alfonso Gatto, Yves Lecomte.

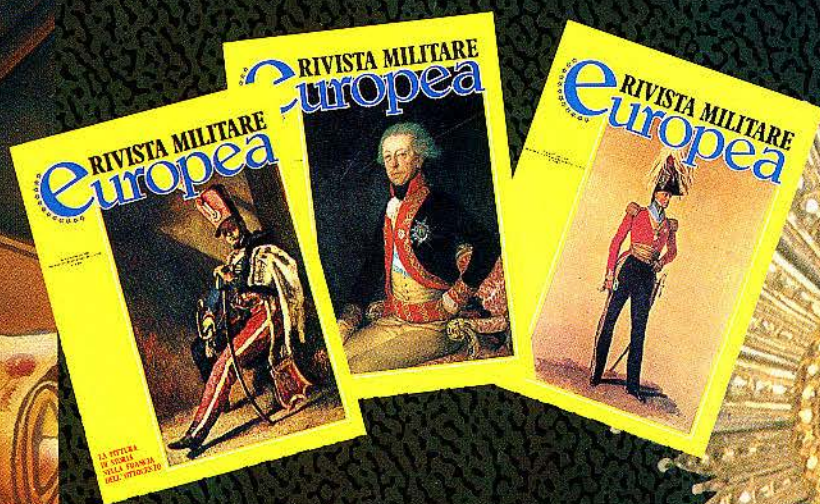
She exhibited her works in many one-artist shows and received national and international appreciation: some of her works belong to private collections and to museums of contemporary art in Italy and abroad.

She exhibited her works, upon invitation, at the University of Vienna, at the University of Valladolid in Spain, at the Sorbonne in Paris and at the Pepperdine University of Malibu, in California. She lives and works in Palermo, in via G. Bonanno 61.



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BIOGRAPHICAL SKETCHES OF MILITARY PAINTERS

RICHARD KNÖTEL



Among all German military painters the best-known and the one having the greatest prestige is still today Knötel for the accuracy of his portraits, freshness of the pictures and incisiveness of expression: his numerous works are still today subject of great admiration and also source of documentation and consultation for scholars and lovers of military fashion sketches and uniforms.

Richard Knötel was born on January 12th, 1857 in Glogau (today Głogów) from August and Rosalie Völkel: his father was a teacher in the grammar school of the same town, but also painter and writer, and his grandfather, whose name was Ignaz, was at first glass dealer, then, from 1809 to 1816, soldier in an artillery regiment, then postman and, at last municipal policeman.

Glogau, formerly called Lugidunum, was at that time a Prussian town and stronghold, on the left side of the Oder: it boasted eight Catholic churches, many and large barracks, a royal castle and an arsenal.

Its fortifications were really imposing: the town belonged first to the Polish kingdom and then to the Bohemian kingdom; in 1741 it was besieged by the troops of Frederick II and after the peace of 1742 was yielded up to Prussia that, after ups and downs, re-obtained it in 1815.

During World War II, the town was almost completely destroyed; today it belongs to Poland.

Knötel was born in a place where military life was very lively and showy: both following his natural bent and above all after his father's encouragement and help, he soon started drawing those soldiers, those horses, cannons, that coming and going of military men he watched every day in the streets, coming in and out of the barracks, going to the surrounding fields.

Very soon he found a valid help in the painter Augustus Senfleben, whose advice was very useful to improve his technique and style: at

that time his inspirer was the battle painter Augustus Bock and under his influence he started painting real war scenes.

Since the artistic bent of the young man was manifest, Knötel was very soon invited to enter the School of fine arts in Berlin, where he studied with zeal and passion and where he got the diploma.

Very soon he understood the importance of the study of uniforms for a painter, who in his works, aims at being very faithful to the historical reality; in other words, he realized the importance of that science called "uniformology".

At first he limited his interest to the history of Prussian uniforms, from the time of Frederick the Great to the national wars: therefore, he started visiting libraries and archives, which of course in Berlin were numerous, but went also to other towns where he searched, took notes and drew very carefully.

So, he started his artistic collaboration with many magazines and periodicals of that time, such as "The illustrated paper", "At home", "O lands and seas"; after becoming well-known and appreciated, he was in great demand and worked for many regiments and military headquarters illustrating with his drawings papers dealing with their own history.

But what made him known to a larger public was the "Berlin's Calendar", published by the Association for the stories of Berlin, and widely-circulated all over Germany: beside his artistic skill, everybody praised his great precision even in details.

Knötel's first important work is that called "The Prussian Army from the most ancient times up to today": started in 1883 with Frederick Krippenstapel, this work was supposed to be published in volumes, but actually only the first volume came out. It was called "Prussian Hussars" (reprinted in 1970) and stresses the beauty of the uniforms of this Cavalry specialty, which in Germany had a very im-

portant history.

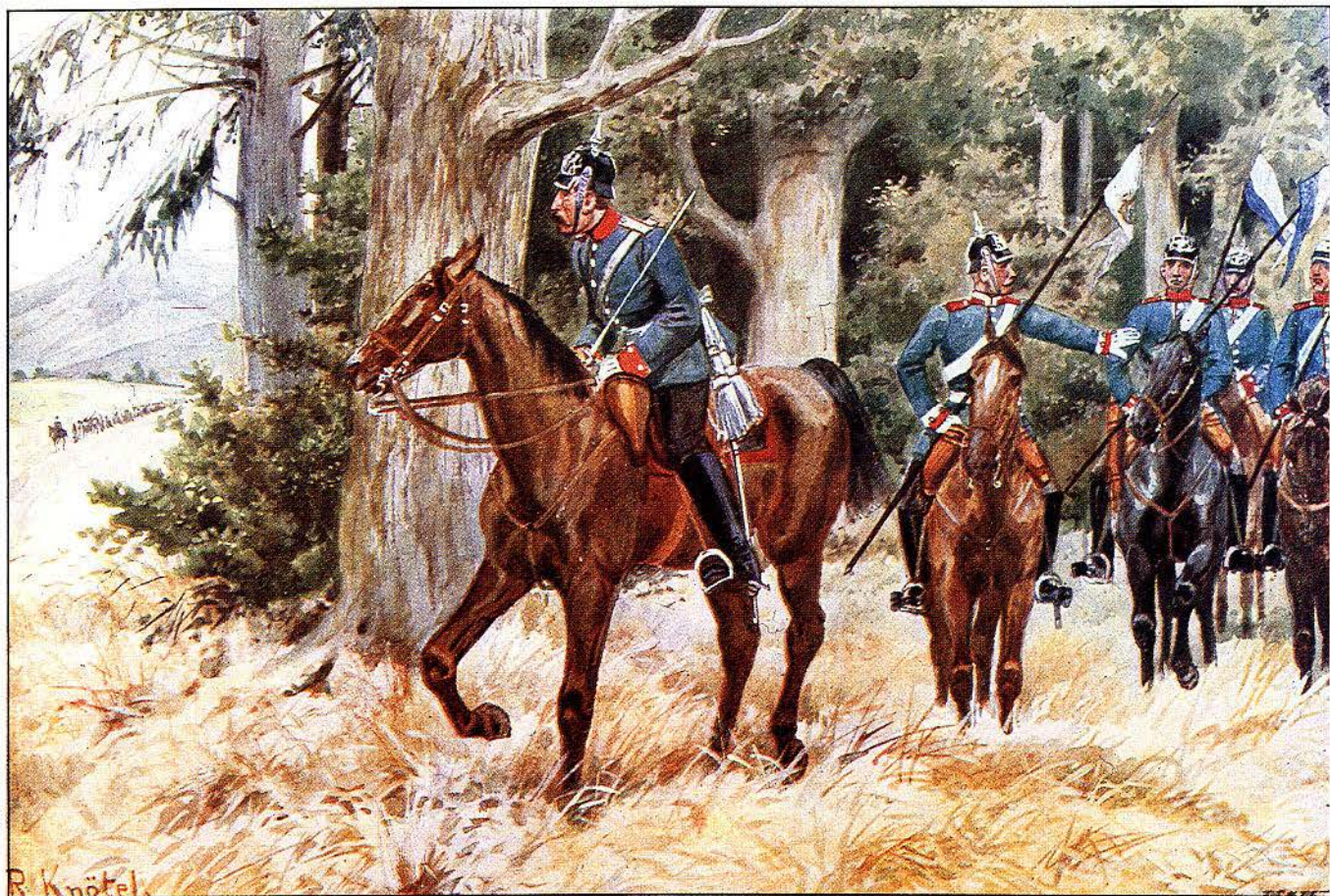
In the following years he devoted to many other works: now Knötel was in great demand and quite sought-after, and his artistic inspiration still alive. In 1886 he illustrated the book written by Lieut. Col. Fedor von Köppen and called "The Hohenzollerns and the Empire"; during the period 1888-1890 and in 1890 respectively he illustrated two more books of the same author "The Prussian Army in drawings and words from 1619 to 1889" and "In the King's overcoat"; in 1887 he had already illustrated the book written by Lieut. Col. Fedor von Köppen and called "The Hohenzollerns and the Empire"; during the period 1888-1890 and in 1890 respectively he illustrated two more books of the same author "The Prussian Army in drawings and words from 1619 to 1889" and "In the King's overcoat"; in 1887 he had already illustrated the book written by Lieut. Col. Hermann Vogt and called "The book of military illustrations, the European armies".

In 1890 a particular work in photolithography, called "Picture book of allegoric parades" was published, which came out on the occasion of the 10th tournament of German shots, that took place in Berlin in the same year: in this work the vividness of stroke and the variety of colours that characterize Knötel's art are much more evident.

In 1892 he started his most important, or better, fundamental work: "Uniformkunde" (The study about the origin of uniforms) is a real encyclopedia of the uniforms of all times and nations; we can say that with this work the author leaves the German sector and enters the international sphere.

The work is made up by 18 "Bands" (volumes) containing about 2,000 coloured and numbered plates, each portraying models wearing the uniforms of one or more Arms or Corps of a single Country and of a certain epoch.

It was very well printed by Max Babenzien of Rathenow and still today those plates, despite the time



passed, are very clear; each of them carries at the foot of the picture short historical notes that show Knötel's carefulness.

Another important work is the "Handbook of uniform science", started by Richard Knötel and containing plates up to 1894 and completed by his son Herbert with plates up to 1936; it was published by his son Herbert Sieg in 1937 with the types by Helmut Gerhard Schulz of Hamburg and in 1966 it was reprinted: it is the detailed history of the uniforms of the Armies, Military Navies and Air Forces of the European Countries and of the main Asian and American Countries with 1,600 models.

In 1898 Knötel had founded, with some other personalities of the historical and artistic world, the "German society for the army science" of which he was president for many years; the magazine of this association, called "Magazine for the

army and uniform science", edited by Knötel himself, is fundamental for the study of uniforms of all times.

The German Emperor ordered many paintings from Knötel: these were partly offered to the military units portrayed. Among these works we have to remember above all:

- "Frederick the Great in the Battle of Reichenbach at the lead of the Regiment of the brown Hussars" (now in Hohenzollern castle);
- "Battle by Garcia Hernandez" (for Hannover castle);
- "Battle by Sedan";
- "Flags of the Brandenburgian-Prussian Army".

As concerns Knötel's literary works, the most famous are: "The iron time of one hundred years ago, 1806-1813", written between 1906 and 1912, and "The death-dance of 1812" of 1912.

As a true Prussian, he was a tireless, very hard worker,

sometimes even a bit stubborn, very exacting with himself; he programmed everything very carefully and spent whole days at home drawing or painting his fashion-plates, often skipping meals, because he was so busy with his creative commitment, or sometimes at night he got up suddenly to complete a sketch or to correct it, if he was not completely satisfied with it. But he also took long walks in the country and woods near Berlin, along the benches of the Spree and even farther on, in order to catch, from life, aspects or hints able to make his scenes and pictures of military life as realistic and natural as possible.

One day, during one of these walks, a terrible storm broke out suddenly and very soon Knötel got wet to the skin. Then he took cover in a half-ruined wretched house rising, as a vestige of past times, in a sort of glade surrounded by century-old trees; when he could come back home he was still dren-



ched and, so, was caught by an attack of temperature that, against his will, forced him to stay in bed. But all considered, it was not so bad, because that wretched house and its surroundings suggested him the idea of setting there the scene of one of his best-done and most suggestive works, that is the one about a scouting Uhlan patrol, in which the brightness of the colours of the uniform, the glittering of arms and the restlessness of the horses emphasize even more the gloomy dreariness and the sadness of the surrounding landscape.

Knötel, who was very amiable, kind and friendly with everybody, as regards art was absolutely strict and did not admit any kind of compromise. About this, there are many anecdotes among which the following one. One day a young painter went to Knötel's house and insisted on being received. After being let in, the young man showed Knötel a work having a military subject and

with strained colours and asked him: "Maestro, I would like your opinion on this". Knötel, who was shocked by that mixture of colours, answered: "I think that if it were a gastronomic speciality with all these sauces it could be digestible for someone, but not for my stomach". Another day, he sharply answered a publisher, who insistently asked Knötel to illustrate with caricatures a humorous book, by saying: "I do not work to make people laugh, I work to make people think". On another occasion, a critic found faults with the expression of some of his pictures but Knötel promptly replied: "I draw military men, not dandies".

Knötel died in Berlin on April 26th, 1914, a short time before the outbreak of World War I, during which those armies, he had wonderfully painted, fought bloodily and for a long time. He was only 57. The whole artistic world of Berlin attended his funeral and also

military delegations were present: the emperor sent a wreath with the colours of his dynasty and an official representative.

Knötel's art was continued by his son Herbert (1893-1963), who was a painter and a writer of military history; among his publications, beside the one above mentioned, we have to remember, among others, the "Encyclopedia of uniforms" and a "History of uniforms".

No doubt Knötel was a well-deserving personality: still today the sciences studying the military fashion sketches and uniforms, because of their rapid evolution and achievement in the more and more complex and specialized culture of the contemporary world, owe a lot to his life and to his work as a painter, an illustrator, a writer and a scholar.

Alessandro Gasparinetti

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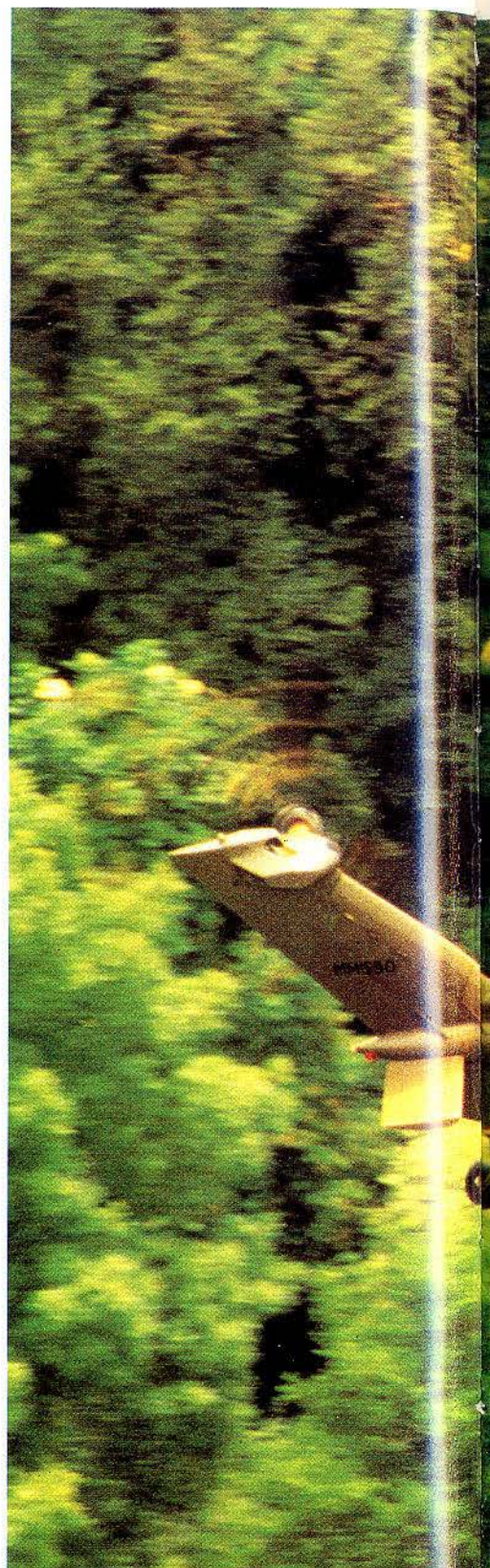
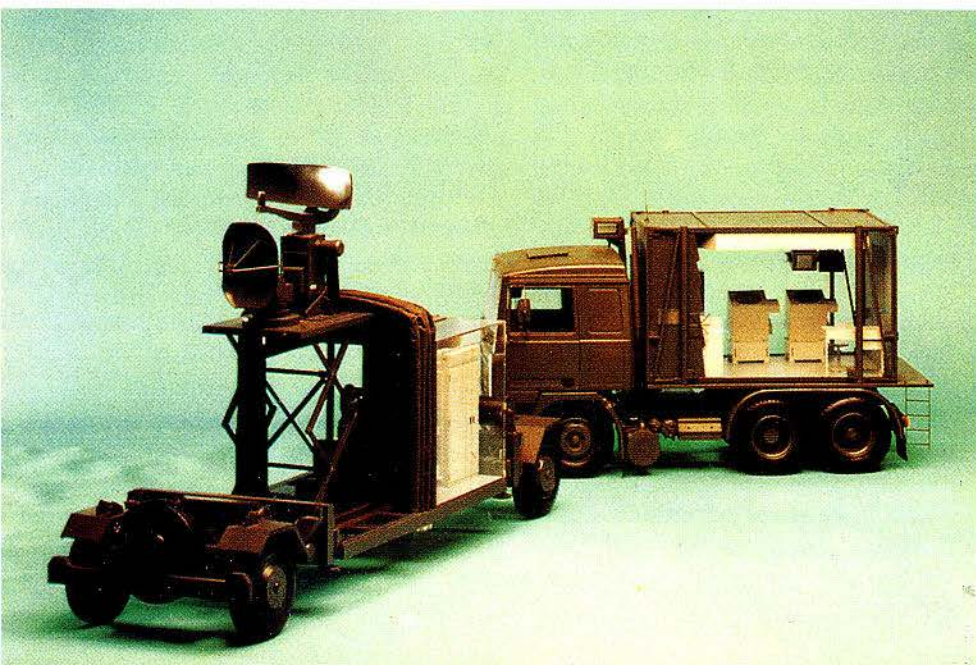
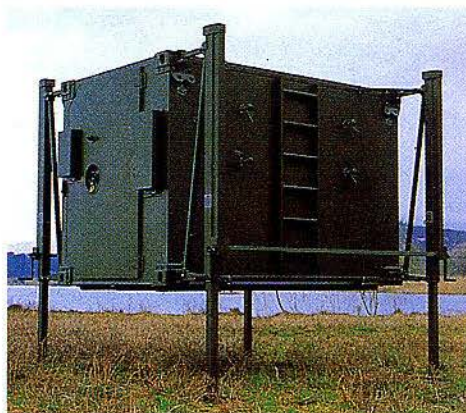
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S.A.I. AMBROSINI

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on the ground*



ENGLISH ITALIAN

GLOSSARY

E

eagle, s.
double-headed **e.**
imperial **e.**
early, ag. av.
early burst
e. departure authorized

e. resupply
e. warning

e. warning data
transmission
at an **e.** date

earmark, s.
to earmark, v.t.

e. force
earmarked for
assignment

earmarked for assign-
ment on mobilization

earth, s.
e. bag
earthquake, s.
e. resisting
e. shock

(arald.) aquila
aquila bicipite
aquila imperiale
presto, in tempo, agli inizi
esplosione tempestiva
autorizzata partenza an-
ticipata
approvvigionamento iniziale
allarme tempestivo, avvi-
stamento a distanza
trasmissione dati av-
viamento a distanza
prossimamente, ad una
data prossima
contrassegno
contrassegnare, mettere
da parte, accantonare, as-
segnare a scopo speciale,
precettare
forza precettata
forze destinate ad essere
assegnate ad un dato co-
mando
forze destinate alla mobi-
lizzazione
terra
sacchetti di sabbia, terra
terremoto
antisismico
scossa sismica

earthwork, s.
ease, s.
stand at **e.!**
east, s.
eastern, ag.
e. countries
easy, ag.
stand **e.!**
E-boat, s.
echelon, s.
"A" **e.**
assault **e.**
attack **e.**
"B" **e.**
blocking **e.**
covering **e.**
delay **e.**

"F" **e.**
follow-up **e.**
forward **e.**
maintenance **e.**
manoeuvre **e.**
rear **e.**
reserve **e.**
to echelon, v.t.
echeloned displacement
echelonment, s.

economic, ag.

terrapieno, fortificazione
riposo, agio
riposo!
est, oriente, levante
dell'est, orientale
paesi dell'Est, orientali
facile
riposo!
torpediniera, motosilurante
scaglione
scaglione "A"
scaglione d'assalto
scaglione d'attacco
scaglione "B"
scaglione di arresto
scaglione di sicurezza
scaglione ritardante, di
contrasto
scaglione "F"
scaglione supplementare
scaglione avanzato
scaglione di manutenzione
scaglione di manovra
scaglione arretrato
scaglione di riserva
scagliare
dislocamento per scaglioni
incolonnamento, scaglio-
namento, suddivisione in
scaglioni
economico

e. mobilization
 e. potential
 e. warfare
 the government's e. policy
economy, s.
 e. of forces
 to disturb the e. of a country
 planned e.
edge, s.
 to take the e. off a sword
 to put to the e. of a sword
 forward e.
 forward e. of battle area
 forward e. of reserve
 defensive zone
 irregular outer e.
edged, ag.
 double e.
 sharp e.
effect, s.
 fire for e.
 personal effects
 psychological e.
 radius of e.
 shock e.
 desired e.
to effect, v.t.i.
 to e. a retreat
 to e. an entrance
effective, ag.
 e. range of weapon
 e. strength
 the **effectives** of an army
effectiveness, s.
 engagement **effectiveness**
efficiency, s.
 combat e.
 troops in a high state of e.
 mechanical e.
 over all e.
 peak e.
 unit e.
 yearly mean e.
 e. report
 operational e.
 physical e.
effort, s.
 combined e.
 concentrated e.
 diversionary e.
 main e.
 secondary e.

mobilitazione economica
 potenziale economico
 guerra economica
 la politica economica del governo
 economia
 economia delle forze
 turbare l'economia di un paese
 economia pianificata
 bordo, orlo, margine, estremità, limite
 togliere il filo a una spada
 passare a fil di spada
 margine avanzato
 margine avanzato dell'area di battaglia
 linea di contenimento
 margine irregolare esterno di campo minato
 affilato, tagliente, arrotato a doppio taglio
 aguzzo, tagliente
 effetto, efficacia
 fuoco di efficacia
 effetti personali
 effetto psicologico
 raggio di efficacia
 effetto d'urto
 risultato voluto
 effettuare, eseguire, compiere, realizzare
 effettuazione una ritirata
 forzare un'ingresso, entrare di forza
 effettivo, efficace, s.
 soldato
 gittata efficace di un arma
 forma effettiva
 gli effettivi di un esercito
 efficacia
 efficacia del combattimento
 efficienza, rendimento
 efficienza combattiva
 truppe in piena efficienza
 rendimento meccanico
 rendimento globale
 rendimento massimo
 rendimento unitario
 rendimento medio annuo
 scheda valutativa del personale
 efficienza operativa
 efficienza fisica
 sforzo
 sforzo congiunto
 sforzo concentrato
 sforzo sussidiario
 sforzo principale
 sforzo secondario

sustained s.
to eject, v.t.
ejector, s.
 e. seat
electronic, ag.
 aviation electronics
 e. counter measures
 e. counter-counter measures
 e. deception
 e. jamming
 e. warfare
 e. warfare support measures
element, s.
 essential **elements** of information
 manoeuvre e.
 National Support E.
 scouting e.
 security e.
 service e.
 e. of resupply
 an e. of truth
 the personal e.
to elevate, v.t.
elevating, ag.
 e. arc.
 e. power
elevation, s.
 e. of security
 e. tint
 spot e. (USA)
elevator, s.
 fork e.
 e. angle
to eliminate, v.t.
to elude, v.t.
to elude the enemy
to embank, v.t.
embargo, s.
 to be under e.
 to lay an e. on a ship
to embargo, v.t.
embarkation, s.
 e. area
 e. order

sforzo sostenuto, prolungato
 gettare fuori, espellere, emettere, respingere
 espulsore (di arma da fuoco)
 sedile eiettabile
 elettronico
 apparecchiature elettroniche della Aeronautica
 contromisure elettroniche
 contro contro misure elettroniche
 inganno elettronico
 disturbo elettronico, guasto
 guerra elettronica
 misure di sostegno nella guerra elettronica
 elemento, unità elementare
 elementi essenziali delle informazioni
 elemento di manovra
 elemento di supporto logistico nazionale
 elemento esplorante
 elemento di sicurezza
 elemento dei servizi
 elemento di riapprovvigionamento
 un elemento di verità
 il fattore umano
 innalzare, elevare, puntare (un cannone)
 che eleva, elevatore, s.
 elevamento
 alzo (di armi da fuoco)
 (aer.) forza ascensionale
 elevazione, angolo di elevazione di un arma, altezza
 altezza di sicurezza
 tinta ipsometrica
 quota
 elevatore, sollevatore, timone di quota
 sollevatore a forcella
 angolo di barra dell'equilibratore
 eliminare, togliere, scartare
 eludere, schivare, evitare, sfuggire
 sfuggire al nemico
 arginare (fiumi, ecc.)
 embargo, fermo, proibizione, divieto, impedimento
 essere sotto sequestro
 mettere l'embargo su una nave
 mettere sotto sequestro, imporre il fermo
 imbarco
 zona di imbarco
 ordine di imbarco

e. plan	piano di imbarco	e. measures	misure di sicurezza
e. commandant	comandante addetto all'imbarco	e. medical treatment	assistenza medica di emergenza
e. day	giorno dell'imbarco	e. operations centre	centro per le operazioni di emergenza
e. table	quadro di imbarco	e. proposal	proposta di emergenza
embassy, s.	ambasciata, missione diplomatica	e. risk (nuclear)	rischio eccezionale (nucleare)
special e.	missione speciale	e. landing field	(aer.) campo di atterraggio di fortuna
to embark, v.t.i.	imbarcare (truppe, merci)	e. substitute	prodotto di sostituzione
to embattle, v.t.i.	schierare un esercito in ordine di battaglia	e. war plan	in caso di emergenza
embattled, ag.	schierato in battaglia, coperto di truppe schierate in battaglia, fortificato	emissary, s.	piano di emergenza in guerra
to embay, v.t.	portare una nave in baia, costringere una nave a riparare in baia	e. mission, s.	emissario, agente segreto, spia
to emblaze, v.t.	(arald.) blasonare, ornare con pezze araldiche	e. emission	emissione, emanazione
emblazonary, s.	blasone, pezze araldiche	e. control	emissione elettronica
emblem, s.	emblema, simbolo	e. control policy	controllo dell'emissione elettronica
to embody, v.t.	riunire, organizzare (truppe)	emitter, s.	dottrina relativa al controllo dell'emissione
to embolden, v.t.	incoraggiare, incitare	emitter location system	trasmettitore
embossment, s.	rilievo	e. valve	sistema di localizzazione di trasmettitori
e. map	mappa in rilievo	emperor, s.	valvola di emissione
embrasure, s.	feritoia per cannone, cannoniera	empire, impero	imperatore
direct e.	cannoniera diretta	emplacement, s.	postazione, piazzuola per armi, il piazzare un'arma in posizione di tiro
oblique e.	cannoniera obliqua	circular e.	postazione circolare
to embroil, v.t.	imbrogliare, ingarbugliare, coinvolgere	horseshoe e.	postazione a ferro di cavallo
to e. a nation in a war	coinvolgere una nazione in una guerra	pit. e.	piazzuola per mortai
to embus, v.t.i.	far salire su un automezzo (specialmente truppe)	supplementary e.	postazione sussidiaria
emergency, s.	emergenza, caso imprevisto, contingenza	employee, s.	impiegato
emergency actions	ufficiale addetto alle azioni di emergenza	civilian e.	impiegato civile
e. actions non commissioned officer	sotto ufficiale addetto alle azioni di emergenza	employment, s.	impiego
e. actions procedures	procedure per azioni di emergenza	e. area	area di impiego
e. action unit (EAU)	unità di emergenza	contemplated e.	impiego previsto
e. anchorage	ancoraggio di emergenza	e. of reserve	impiego della riserva
e. bridge	ponte provvisorio	plan of e.	piano di impiego
e. broadcast system	sistema di trasmissione di emergenza	tactical e.	impiego tattico
e. burial	sepoltura provvisoria	technical e.	impiego tecnico
e. camp	campo di fortuna	tentative plan of e.	ipotesi di impiego
e. commission	comitato provvisorio	to empower, v.t.	autorizzare, dare pieni poteri
e. complement	quadro degli effettivi in tempo di crisi	empress, s.	imperatrice
e. condition	situazione di emergenza	to encamp, v.t.i.	accampare, accamparsi
e. destruction of nuclear weapons	distruzione urgente di armi nucleari	encampment, s.	accampamento
e. fleet operating base	base logistica di soccorso per una flotta	enceinte, s.	cinta (di mura, bastioni, ecc.)
e. in war	stato d'emergenza in tempo di guerra	to encipher, v.t.	cifrare (messaggio, dispaccio)
e. landing procedures	procedure per atterraggio	to encircle, v.t.	accerchiare, circondare, cingere
e. maintenance	manutenzione di emergenza	encircling, encirclement, s.	accerchiamento
e. means	mezzi di fortuna	to enclose, v.t.	accerchiare, circondare, accludere, allegare
		enclosure, s.	allegato, recinto, luogo cintato
		two enclosures	due allegati
		e. wall	muro di cinta

barbed wire **e.**
to **encode**, v.t.
encomium, s.
to **encompass**, v.t.

encounter, s.
to **encounter**, v.t.

to **encroach**, v.i.

encroacher, s.
encroachment, s.
end, s.
e. fall-out

end of message
e. of mission
end of task

to **endanger**, v.t.

to **e.** a country

to **e.** the army's chances
of success

to **endorse**, v.t.

to **e.** a document
to **endow**, v.t.

to **e.** a person with powers

endowment, s.
e. fund
endurance, s.

e. distance
e. flight
e. limit
e. speed
e. test
e. time
physical **e.**
enemy, s.

e. action
e. aircraft
e. alien
e. capabilities
e. contact report

e. fire
e. in sight
e. occupied territory
enemy position
e. prisoner of war

e. strength
potential **e.**
the **e.** were forced to
retreat
energy, s.

recinto di filo spinato
cifrare
encomio, lode solenne
circondare, racchiudere,
cingere, complottare
scontro, lotta, duello
incontrare, affrontare
(ostacoli, nemici)
usurpare, invadere, lede-
re, abusare
usurpatore
usurpazione, invasione
fine, termine
termine della ricaduta ra-
dioattiva
fine del messaggio
cessate il fuoco
fine della missione, del
compito assegnato
mettere in pericolo, com-
promettere, rischiare
attendere alla sicurezza di
un paese
compromettere le possi-
bilità di riuscita di un e-
sercito
vistare, firmare, approva-
re, appoggiare
vistare un documento
dotare, provvedere, for-
nire
conferire poteri ad una
persona
dotazione, assegnazione
fondo di dotazione
resistenza, durata, sop-
portazione
distanza di autonomia
volo di durata
limite di fatica
velocità oraria media
prova di durata
durata totale
resistenza fisica
nemico, avversario, le for-
ze nemiche
azione nemica
aviazione nemica
straniero nemico
le capacità del nemico
rapporto sulla presa di
contatto con il nemico
fuoco nemico
nemico in vista
territorio occupato
posizione nemica
prigioniero di guerra
nemico
forza del nemico
nemico potenziale
il nemico fu costretto a
ritirarsi
energia, forza, vigore

energy distribution

e. of friction
atomic **e.**
electrical **e.**
nuclear **e.**
enfilade, s.
to **enfilade**, v.t.

to **engage**, v.t.i.

to **e.** the enemy

the nations **engaged** in
war
to **e.** in battle
engaged, ag.
the army was **e.** in battle

engagement, s.

to meet an **e.**
breaking of **e.**
e. control

to **engaul**, v.t.
engine, s.
charging **e.**

Diesel **e.**
electrical **e.**
international combus-
tion **e.**
jet **e.**
e. life expectancy

maintenance
petrol **e.**
e. repair shop

e. room
e. speed indicator
air-cooled **e.**
fire **e.**
hot air **e.**
engineer, s.

E. Corps
the **Engineers**
consulting **e.**
engineering, s.
field **e.**
marine **e.**
military **e.**
naval **e.**
radio **e.**
to **enlist**, v.t.i.

to **e.** recruits
to **e.** under the banner
of liberty
enlisted men

curva di distribuzione
dell'energia
lavoro di attrito
energia atomica
energia elettrica
energia nucleare
infilata
colpire d'infilata, colpire
con fuoco di fila
impegnare battaglia, in-
gaggiare, impegnarsi
impegnare il nemico in
battaglia
le nazioni prendevano
parte alla guerra
ingaggiare battaglia
impegnato
l'esercito era impegnato
in combattimento
impegno, scontro, azione,
combattimento
assolvere un impegno
rottura del combattimento
controllo d'intercettazio-
ne (difesa aerea)
imprigionare
motore, macchina
generatore di corrente
elettrica
motore Diesel
motore elettrico
motore a combustione in-
terna (a scoppio)
motore a reazione
presunta durata del
motore
manutenzione motori
motore a benzina
officina per la riparazione
dei motori
sala macchine
contagiri motore
motore raffreddato ad aria
auto pompa
motore ad aria calda
soldato del genio, inge-
gnere
corpo del Genio
il Genio
consulente tecnico
ingegneria, lavori del genio
lavori campali
ingegneria navale
genio militare
genio navale
radiotecnica
arruolare, arruolarsi, in-
gaggiare, ingaggiarsi
arruolare delle reclute
offrirsi per la causa della
libertà
militari di truppa, soldati
semplici

enlistment , s. enmity , s. to be at e. with a country	arruolamento, ingaggio ostilità, inimicizia essere in cattivi rapporti con una nazione arruolare, ingaggiare, im- matricolare, iscrivere, re- gistrare	envoy , s. envoy extraordinary epaule , s. epaulement , s.	inviato, messo (diploma- tico) inviato speciale spalla di baluarda spalliera di fortificazione a fianco di batteria
to enrol, v.t.		epaulet (te), s. to win one's epaulettes epic , ag. to equip, v.t.	spallina essere promosso ufficiale epico equipaggiare, allestire, ar- mare, fornire, attrezzare essere fornito di
enrolment , s.	arruolamento, iscrizione, registrazione bandiera, stendardo, inse- gna, distintivo, alfiere, portabandiera, guardia- marina	to be equipped with equipage , s.	equipaggiamento, attrez- zatura (per un viaggio) equipaggiamento, corre- do, armamento
ensign , s.	ufficio, grado d'alfiere impigliare furono coinvolti nello spionaggio internazionale	equipment , s. antifire e.	equipaggiamento per lavori del genio corredo ausiliario materiale da demolizione equipaggiamento per la- vori del genio
ensignacy , s. to entangle, v.t. they e. themselves with international spies entanglements , s. barbed wire e. to enter, v.t.i.	reticolato di filo spinato entrare, entrare a far parte di, iniziare entrare nell'Esercito lanciarsi in una guerra entrare in carica entrare in servizio mettere sul trono, incoro- nare, investire, insediare investitura, intronizzazione concedere un diritto, qua- lificare avere diritto a salire, far salire in treno (truppe) trincerare, munire di trin- cee, fortificare trincea, riparo, trincera- mento circondare, accerchiare (il nemico) avvolgente attacco avvolgente avvolgimento avvolgimento a corto rag- gio accerchiamento manovra avvolgente avvolgimento ad ampio raggio busta, involucro busta paga circondare, accerchiare, attorniare accerchiato da nemici ambiente, condizioni am- bientali, situazione ambientale inquinamento ambientale punto di partenza degli automezzi ambiente favorevole al- l'impiego di armi nucleari ambiente tattico affrontare (pericolo) l'affrontare (pericolo)	ancillary e. demolition e. engineering e. e. collecting point e. component list e. deadlined for maintenance e. distribution and con- dition report e. modification list e. on hand e. operationally ready e. performance report first aid e. individual e. minimum essential e. organizational e. protective e. signals e. ermine , s. ermined , ag. error , s. clerical e. e. and omissions ex- cepted e. cause identification e. detection an cor- rection circular probable e. probable delivery e.	spallina essere promosso ufficiale epico equipaggiare, allestire, ar- mare, fornire, attrezzare essere fornito di equipaggiamento, attrez- zatura (per un viaggio) equipaggiamento, corre- do, armamento equipaggiamento per lavori del genio corredo ausiliario materiale da demolizione equipaggiamento per la- vori del genio punto di raccolta dell'equipaggiamento elenco dei componenti l'armamento equipaggiamento per il quale la manutenzione è obbligatoria rapporto sulle condizioni e la assegnazione dell'e- quipaggiamento elenco delle modifiche all'equipaggiamento materiali immediatamen- te disponibili materiale immediatamen- te pronto all'uso rapporto sullo stato dei materiale materiale di pronto soc- corso equipaggiamento perso- nale equipaggiamento minimo essenziale equipaggiamento di re- parto equipaggiamento protet- tivo materiale delle trasmis- sioni (arald.) ermellino (arald.) ermellinato errore errore di trascrizione salvo errori ed omissioni identificazione della causa dell'errore scoperta e corezione dell'errore errore circolare probabile probabile errore di lancio
enthronement , s. to entitle, v.t.			
to be entitled to to entrain, v.t.i.			
to entrench, v.t.i.			
entrenchment , s.			
to envelop, v.t.			
enveloping , ag. e. attack envelopment , s. close e.			
double e. single e. wide e.			
envelope , s. pay e. to environ, v.t.			
enviored by enemies environment , s.			
environmental , ag. e. pollution embussing point			
nuclear e.			
tactical e. to envisage, v.t. envisagement, s.			

escalade, s.
to escalate, v.t.
escape, s.
to escape, v.t.i.
 they escaped from the enemy
 to escape from prison
escapee, s.
escarp, escarpment, s.
to escarp, v.t.

escort, s.
 armed e.
 to conduct a prisoner under e.
escort division
 e. guard
 e. planes
 e. vessel
 horseback e.
to escort, v.t.
escutcheon, s.
espionage, s.
 counter e.
 e. network
esplanade, s.
esprit, s.
esprit-de-corps
essential, ag.

e. cargo
 e. elements of information
 e. supply

to establish, v.t.

to e. close relations with
 to e. communications
 to e. contact
 to e. someone's innocence
establishment, s.

e. of contact with the enemy
 war e.
estimate, s.

e. of the situation

e. of enemy capabilities

intelligence e.
 e. of the objective
 rough e.
 weather e.

to make an e.

scalata
 scalare
 fuga, scampo, salvezza
 fuggire, evadere, scappare
 fuggirono dal nemico

evadere dal carcere
 evaso
 scarpata
 renderé erto, ridurre a scarpata, munire di scarpata
 scorta, guida
 scorta armata
 scortare un prigioniero

divisione di scorta
 guardia di scorta
 aerei di scorta
 avviso di scorta
 scorta a cavallo
 scortare, accompagnare (arald.) scudo
 spionaggio
 controspionaggio
 rete di spionaggio
 spianata
 spirito
 spirito di corpo
 essenziale, fondamentale, sostanziale, principale, indispensabile
 carico essenziale
 elementi indispensabili di informazione
 approvvigionamento indispensabile
 stabilire, fondare, impiantare, istituire, costituire, dimostrare
 stringere rapporti stretti con
 impiantare i collegamenti
 stabilire il contatto
 dimostrare l'innocenza di qualcuno
 fondazione, costituzione, stabilimento
 presa di contatto col nemico
 effettivi di guerra
 stima, giudizio, valutazione, calcolo, apprezzamento
 valutazione della situazione
 valutazione delle possibilità del nemico
 apprezzamento informativo
 valutazione dell'obiettivo
 valutazione approssimativa
 valutazione delle condizioni meteorologiche
 prevenire, fare un preventivo

the Estimates

to estimate, v.t.

to e. damages
estimated arrival date
 e. duration time
 e. figure
 e. time of arrival
estimated time of departure
 e. time of return
estimation, s.

range e.
etiquette, s.

to evacuate, v.t.

evacuation, s.

aeromedical e.

air e.
 e. of casualties

casualty **evacuation**
 plan
 e. control ship

e. convoy
 e. route
 medical e.
evacuee, s.
to evade, v.t.

evader, s.

evaluation, s.

e. of enemy targets

e. of information

terrain e.
evasion, s.
 e. and escape

eventration, s.
evolution, s.

ex, prefix
 ex service man
to examine, v.t.i.

examination, s.
 cross-examination
examiner, s.

board of **examiners**
example, s.
 without example

il bilancio preventivo dello Stato
 stimare, valutare, fare la stima di, prevenire
 fare la stima dei danni
 presunta data di arrivo
 presunto tempo di durata
 cifra preventivata
 presunta ora di arrivo
 presunta ora di partenza

presunta ora di rientro
 stima, apprezzamento, valutazione
 stima della distanza
 etichetta, cerimoniale, protocollo
 evacuare, sfollare, ritirare (truppe)
 evacuazione, sgombero, sfollamento, ritiro
 sgombero sanitario per via aerea
 aereosgombero
 sgombero feriti e ammalati
 piano di sgombero feriti e ammalati
 nave per il controllo dello sgombero
 convoglio di sgombero
 asse degli sgomberi
 sgombero sanitario
 sfollato
 evadere, sfuggire, sottrarsi a
 evaso (da un territorio occupato)
 valutazione, calcolo, apprezzamento
 valutazione degli obiettivi
 nemici
 valutazione di una informazione
 valutazione del terreno
 evasione
 evasione dal nemico e fuga in zona alleata
 sventramento
 (mar. mil.) evoluzione, manovra
 ex, già, un tempo
 ex combattente
 esaminare, verificare, ispezionare
 esame, ispezione, verifica
 controinterrogatorio
 ispettore, esaminatore, verificatore
 commissione d'esame
 esempio, modello
 senza precedenti

to exchange, v.t.i.

to **e.** from one regiment into another

to excuse, v.t.

excused from duty

to execute, v.t.

execute and report the soldier **executed** the captain's orders

to **e.** a change of front

to **e.** an order readily

execution, s.

to carry something into **e.**

to put something in **e.**

e. of an order

warrant for **e.**

the war did great **e.**

executive, ag.

e. committee

e. order

e. officer

e. powers

to exempt, v.t.

to **e.** from military service

exemption, s.

provisory **e.**

exercise, s.

aiming **e.**

air defence **e.**

alert **e.**

combined **e.**

command post **e.**

e. day

daylight **e.**

disembarking **e.**

elementary **e.** without troops

e. of command

e. specification

e. with troops

e. commander

e. planning directive

e. programme

cambiare, scambiare, barattare, passare

passare da un reggimento a un altro

esentare, dispensare dal fare

esente dal servizio

eseguire (ordine, comando)

eseguire e ripetere

il soldato eseguì gli ordini del capitano

eseguire un cambiamento di fronte

dare pronta esecuzione ad un ordine

esecuzione, compimento, attuazione, distruzione, effetto distruttivo

mettere in esecuzione qualcosa

dare corso a qualcosa

esecuzione di un ordine

ordine di esecuzione

la guerra portò distruzione

esecutivo

comitato esecutivo

ordine esecutivo, decreto legge

ufficiale esecutivo (USA)

poteri esecutivi

esentare, esonerare

esonerare dal servizio militare

esenzione, esonero, dispensa

congedo provvisorio

esercitazione, esercizio, manovra

esercizio di puntamento

esercitazione di difesa aerea

esercitazione in preparazione di allarme

esercitazione combinata

esercitazione per posti di comando

giorno d'inizio della esercitazione

esercitazione diurna

esercitazione di sbarco

esercitazioni elementari senza truppe

esercizio del comando

descrizione dettagliata dell'esercitazione

esercitazione con le truppe

comandante dell'esercitazione

direttiva per la programmazione dell'esercitazione

programma annuale delle manovre o esercitazioni

e. specification

fall **e.**

field training **e.**

firing **e.**

joint **e.**

live firing **e.**

map **e.**

military exercises

mobilization **e.**

naval **e.**

night **e.**

one sided **e.** with troops

outdoor **e.**

physical **e.**

tactical **e.**

terrain **e.**

two sided **e.** with troops

winter **e.**

to exercise, v.t.i.

exhaust, s.

e. pipe

e. ring

e. silencer

e. valve

exhaustive, ag.

e. enquiry

exile, s.

to condemn to **e.**

to go into **e.**

to live in **e.**

exile, s.

to exile, v.t.

he was exiled from his country

he was exiled for life

to exonerate, v.t.

exoneration, s.

expansionism, s.

policy of **e.**

to expatriate, v.t.

to **e.** oneself

expatriation, s.

to expedite, v.t.

to expedite matters

expedition, s.

expeditionary, ag.

British Expeditionary Force

to expel, v.t.

expendable, ag.

e. supplies and materials

descrizione dettagliata di una esercitazione

esercitazione autunnale

esercitazione campale

esercitazione di tiro

esercitazione interforze

esercitazione a fuoco

esercitazione sulla carta

esercitazioni militari, manovre

esercitazione di mobilitazione

esercitazione navale

esercitazione notturna

esercitazione con le truppe a partito unico

esercizio all'aria aperta

esercizio fisico

esercitazione tattica

esercitazione sul terreno

esercitazione con le truppe a partiti contrapposti

esercitazione invernale

esercitare, esercitarsi, allenare, allenarsi

scarico, scappamento

tubo di scarico

collettore di scarico

silenziatore

valvola di scarico

esauriente, completa

ricerca approfondita

esilio, bando

condannare all'esilio

andare in esilio

vivere in esilio

esule, esiliato

esiliare, mettere al bando, scacciare

fu esiliato dalla patria

fu esiliato a vita

esonere, dispensare

dispensa, esonero

espansionismo

politica di espansionismo

espatriare, bandire, esiliare

espatriare, rinunciare alla propria nazionalità

espatrio

accelerare, sbrigare, compiere con sollecitudine

sollecitare la questione

spedizione, impresa

di spedizione

Corpo di Spedizione Britannico

espellere, bandire, cacciare

da abbandonarsi in caso di necessità

materiali che possono essere abbandonati o usati

in caso di necessità, di scarso valore intrinseco.

expendables, s.pl.

office **e.**

war **e.**

expenditure, s.

e. rate

expense, s.

at the **e.** of his life
incidental expenses
overhead expenses
travelling expenses

experimental, ag.

e. division

experimental flight

e. station

e. target

expert, s.

expiration, s.

date of **e.**

to **expire**, v.t.i.

this driving licence expires in January

expiry, s.

to **explode**, v.t.i.

exploit, s.

to **exploit**, v.t.i.

exploitation, s.

explosion, s.

e. bomb

e. engine

explosive, ag. s.

demolition **e.**

high **e.**

high **e.** armour piercing

high **e.** incendiary

high **e.** shell

plastic **e.**

materiale di consumo, da abbandonarsi se necessario

materiali di cancelleria
forniture militari di guerra

consumo, spesa

tasso di consumo

spesa, sborso, uscita, prezzo

a prezzo della vita

spese casuali

spese generali

indennità di viaggio

sperimentale

divisione sperimentale

volo sperimentale

bersaglio sperimentale

esperto, perito, tecnico, specialista, competente

fine, scadenza, termine

termine di scadenza

finire, scadere

questa patente scade a gennaio

termine, scadenza

esplodere, far esplodere, saltare, far saltare, scoppiare, far scoppiare.

gesta, impresa, azione eroica

utilizzare, sfruttare

sfruttamento del successo in battaglia o massima

utilizzazione di una informazione per motivi strategici o tattici

esplosione, scoppio

bomba calorimetrica

motore a scoppio

esplosivo, bomba

esplosivo da demolizione

alto esplosivo

alto esplosivo perforante

alto esplosivo incendiario

granata ad alto esplosivo

esplosivo plastico

sensitive **e.**

e. filled mine

explosive ordinance

explosive ordinance

disposal

e. ordinance disposal incident

e. ordinance disposal procedures

e. ordinance reconnaissance

e. oil

to **expose**, v.t.

to expose oneself (to danger)

exposed, ag.

exposed to view

warned and **exposed**

unwarned and **exposed**

exposed to the weather

to be **exposed**

exposure, s.

exposure dose

to die of **exposure**

to **extend**, v.t.i.

to **e.** forces

e. order

e. number

e. of enlistment

extermination, s.

extinct, ag.

an **e.** office

extinction, s.

to **extinguish**, v.t.

to **e.** a fire

extinguisher, s.

to **extract**, v.t.

to **e.** a bullet

extraction, s.

e. parachute

extradition, s.

extraordinaries, s.pl.

extraterritorial, ag.

esplosivo sensibile

mina caricata

esplosivi e munizioni

neutralizzazione di munizioni esplosivi

probabile presenza di esplosivi

procedure per la neutralizzazione di esplosivi

ricognizione e ricerca di esplosivi

nitroglicerina

esporre, abbandonare (ai pericoli), lasciare all'aria

esporsi (al pericolo)

esposto, allo scoperto

esposto alla vista

esposto e preavvisato

esposto e non preavvisato

esposto alle intemperie

essere allo scoperto

esposizione (al freddo, al caldo, ai pericoli)

dose di esposizione (radiazioni)

morire per assideramento

spiegare, spiegarsi

spiegare le truppe

ordine spiegato

interno numero..

proroga della leva

distruzione, sterminio

estinto, scomparso, abolito, caduto in disuso

carica abolita

estinzione, annientamento

estinguere, spegnere

spegnere un incendio

estintore

estrarre, togliere, levare

estrarre una pallottola

estrazione

paracadute estrattore

estradizione

(arc. mil.) soprassoldo

estraterritoriale





A cura di
Giuseppe Caforio e
Piero Del Negro

Ufficiali e società

Interpretazioni e modelli

FrancoAngeli

"Ufficiali e Società. Interpretazioni e modelli", ("Officers and Society. Interpretations and models"), By Giuseppe Caforio and Piero Del Negro, Ed. Franco Angeli, Milan, 1988, pages 576, L. 35,000

This volume contains the deeds of the Meeting "The military profession: sociology and history" that took place in Lucca from 10th to 12th October 1986. The meeting, organized by the Interuniversity Centre for historical-military studies and research, intended to confront historians and sociologists interested in the study of the military Institutions.

The Meeting tried to answer some questions. Does the military profession exist? To what age does the birth of the military profession date back? Which was the historical evolution of this profession? Which models represent its present dynamics in comparison with the Society and the State?

The interesting material collected in these deeds was divided into three big sectors.

In the first sector are those statements con-

cerning the military profession from the Napoleonic age to World War II.

The second sector contains the reports about the Military profession in the European States from France to the Federal Republic of Germany, from Great Britain and Switzerland to the Eastern Countries of the continent.

The third sector deals with the subject of the military profession in Italy from 1948 to the present.

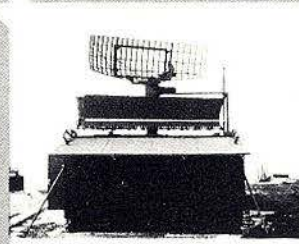
These deeds show the differences and common points of the profession in the three Armed Forces. It also describes the history of some Institutes training for this profession.

A series of statements about the relations among military profession, politics and culture closes the third sector.

Some supplements with summaries in English of the speeches, information about the reporters and about the Interuniversity Centre for historical-military studies and research and some statistical data close the volume.

Augusto Mastrofini

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The Army within the
Defence Pattern of
the Year 2000
- ★ **VITTORIO BERNARD**
NATO 40 Years of
Peace and Progress
in Security
- ★ **RUDYARD KIPLING**
France at War





CONTRIBUTORS
The Army within the Defence pattern of the year 2000
VITTORIO BERNARDI
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Rivista Militare aims at broadening and updating the technical and vocational training of Officers and NCOs. It is thus a means of propagating the military way of thinking and a forum of study and debate. Through the publication of articles of technical and scientific interest, Rivista Militare also aims at informing the general public on the Army and on military issues.

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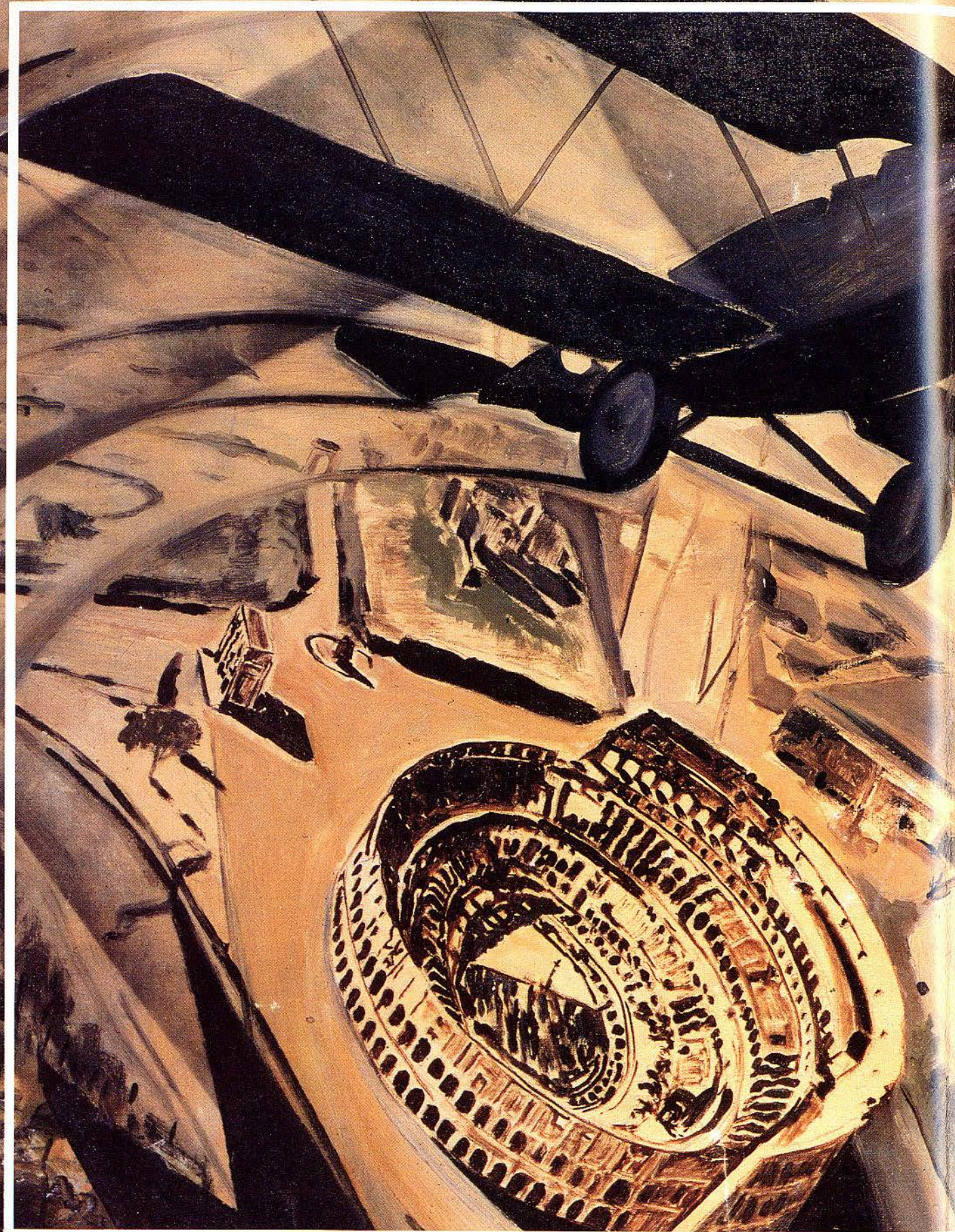
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THE ARMY WITHIN THE DEFENCE PATTERN OF THE YEAR 2000

The Army within the defence pattern of the year 2000 has been one of the typical subjects of the last years. It generally consists in an outline of the structural deficiencies inherited from the past, in a general view which testifies the good will of the present and in a more optimistic forecast for the future based on more or less legitimate omens.

We may even say that the subject may represent a sort of alibi for it allows to leave to the future the most difficult choices and changes.

Thus, to start with I would like to clear a misunderstanding: the Army of the year 2000 does not belong to the future, because the time needed to set up such a complex instrument must be reckoned in years, the very small number of years which divides us from the above mentioned date. It is thus a very topical subject as the Army of the year 2000 should already be in preparation and should require almost immediate choices and decisions.

However, to achieve the above, ideas, as well as intentions, should be very clear. This does not regard the technical aspects - already well

defined as regards choices and programmes - but, in the particular period we are experiencing, the expectations of the Nation and the kind of response it intends giving to the demand for security and defence in terms of consent, that is of human and financial resources to be employed.

Nowadays, to define the operational choices designed to create what in a few years will be the Army of the year 2000, it is not sufficient to say what has been done and what still remains to be done; it seems just as necessary to say whether the Army that we are creating will correspond, by that date, to the instrument deemed necessary by the Nation for the safeguard of its security.

As may be understood by the above what I propose is not only a programmatic presentation but also the assertion of a principle: that in the year 2000 we must continue to have a credible Army, because nowadays we still feel the need for it.

For the sake of clearness, I shall briefly outline the organizational development of the Army over the last forty years and I shall then deal



ORGANIZATIONAL DEVELOPMENT OF THE ARMY FROM AFTER THE SECOND WORLD WAR TO OUR DAYS

Looking backwards we can spot three important periods which have marked the evolution of the Army from after the second World to our days:

- the period of the reconstruction and the development, from '45 to '54;
- the internal reorganization, from '55 to '74;
- the restructuring, from '75 to '84.

As is well known, the years leading to '54 were marked by the fact that Italy joined NATO, the cold war, the massive response strategy and by the consistent support of the United States as regards equipment.

It was an undoubtedly difficult period, full of political and social limitations, besides those of a technical-operative nature, in which the Armed Forces had to reconstruct themselves on the previous structure - rather vast compared to the new requirements - and without being able to rely on a national industrial and technological support. This partly prevented a rational organization of the new Army and opened the path to a long dependence on foreign countries as regards arms and materials and also as regards training techniques and procedures.

The second period, from the mid 50s to the mid 70s witnessed the passage from the cold war to the "confrontation" between the blocs, some redimensioning of the perception of the threat and the assertion of the flexible response strategy.

The need to adapt structures and modernize arms systems stemmed from the gradual decrease of a deterrence exclusively entrusted to the American nuclear superiority and from the ensuing revaluation of conventional forces.

The first and second reorganization which followed suite in the 60s

with the many requests and proposals of change put forth at present by the Nation.

A survey of the past is important to evaluate the range - also as regards the influence on the present situation - of conditionings and limitations set to the Armed Forces.

A survey of current opinion is also dutiful for at least two good reasons: first to keep the Army and generally speaking the Armed Forces bound to wider consent; second, to allow decisions regard-

ing the development and, if necessary, the changes, compatible both with the external demand for security coming from our engagements with the Alliance and with the domestic demand.

It must always be borne in mind that the Army is the authentic expression of the national collectivity from which it draws its moral stimulus and those resources which allow the entire organization to exist and operate on competitive terms or, to put it in military words, in terms of credibility.

are symbolic of how, in particular decisional periods, certain contingent aspects which are the result of the particular period may have a positive or a negative influence.

It is quite true. In fact at the beginning of the 60s in an atmosphere of high perception of the conventional threat and of great industrial development, the excessive re-sizing achieved by the operational component favoured the compatibility of the Italian defensive pattern in the light of the Nato engagements. This, however, also imposed a process of accelerated contraction due to the increasing costs for the upkeep of the efficiency of the entire instrument and for the accomplishment of the development under way.

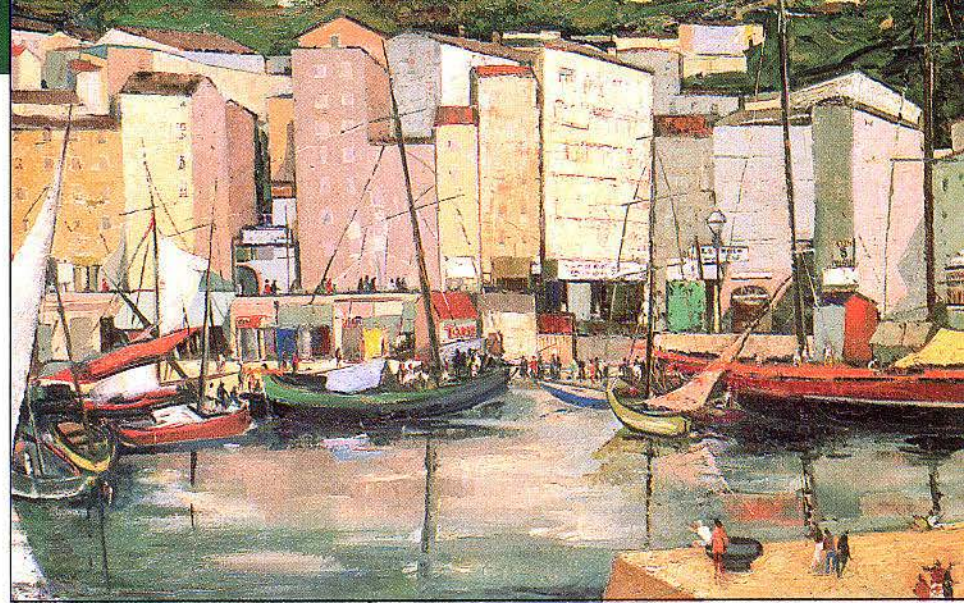
It was a forced and unplanned evolution which had to tolerate inconsistencies, for example, as regards integration of joint forces and command organization, operational division of units and logistic support.

Lastly, we reach the '75 reorganization when the Army, together with the other two Services, faced, in a different geopolitical, social and economic situation, a type of problem which had been known since the previous decade: the need for "self-investing" its own quantitative contraction in favour of modernizing programmes which could not be further delayed.

Under this circumstance it was impossible to achieve the aim of elevating the quality of the forces, despite the reorganization, because use of the gradual dwindling of the financial support and of the effect of inflation on the resources granted by the promotional laws.

In sum - and this must be borne in mind in view of future programmes - we may state that the actual results of the '75 reorganization only consisted in a reduction of operational forces while in the course of time other deficiencies have been added to those of the past.

Since '84 the Army has continued



to adapt to budget deficiencies, intervening essentially on territorial support bodies, with the aim of recovering human and financial resources to be employed for the priority requirements of the operational component. This, however, still presents several functional deficiencies on which we are working within the narrow limits of available financial resources.

The present deficiencies, which concern the fields of mobility, of ground fire support, of the anti-tank, anti-aircraft defence and command and control, greatly affect the degree of credibility of the instrument. This also in the light of an important, favourable re-sizing of the threat.

This survey of the past allows us to appreciate the weight of social and economic pressures which lie at the basis of military choices as well as the structural and functional imbalance of the Army of today.

We cannot ignore the persisting misconception according to which budget reductions should essentially be made on the human component which is the least expensive and thus imposes great sacrifice for very modest savings.

Actually, in this manner we do not account for the fact that ships, aircraft or tanks, that is the most costly means, need men for their employment. In the light of the above the number of men is seen as an independent variable on which to intervene without any connec-

tion with the rest of the instrument. Thus, in the military field as well, we adopt a method of intervention which is typical of our Nation and which allows to achieve immediate, though modest, savings which, in the medium or long run, reveals all its inefficiency as it leaves the functional and structural problem, that is the real problem, unsolved.

This not very comforting situation now has to face a positive development of East-West relations which has given rise to movements of opinion also in our country.

Let us now examine them with the aim of drawing clear indications for the process of restructuring of our Army according to the needs of the year 2000.

PRESENT REQUESTS AND PROPOSALS FOR A CHANGE IN THE ITALIAN ARMED FORCES

Unfortunately, domestic politico-social signals as regards security do not give us a better understanding of facts, but on the contrary increase our confusion.

A first symptom of this is the fact that the more or less generalized syndrome of a slackening of the perception of the threat is experienced very differently from our NATO partners.

While in the rest of Europe we witness a cautious reaction aiming at a mutual reduction of forces to



reach agreed upon lower levels, in our Country where the perception of the threat has always been rather low and limited to a few "virtuosos" there has been an unjustified peak of emotional pacifism, a reaction of the kind "everyone back home" amplified by the high imagination of mass media. The Gorizia threshold has thus become in turn the "Tartars' desert" or the "Bastiani fortress", creating some embarrassment to our representatives in the different negotial forums.

A second symptom on which I wish to dwell, both for the variety of the ensuing initiatives and for the danger of the consequences, is bound to the following: savings on military expenditure and détente between the United States and the Soviet Union.

The eventual economic advantages resulting from the cut of the enormous military expenditure have undoubtedly contributed in inducing the Soviet Union to détente and found the consent of the United States penalized by the increasing burden of the military confrontation and have subdued the European NATO partners which are certainly less burdened in this respect. If we bear in mind that, generally speaking, the idea of saving resources is at the basis of the present fluidity and that in the last forty years Italy has shown a true and proper vocation for saving - so much so that it is the NATO country which spends less for its security - it is difficult to un-

derstand how, in our country, there are proposals for changes in the Armed Forces involving higher expenses than the present ones.

The first proposal I intend examining is the one that considers the creation of professional Armed Forces, reduced in number, but with first quality experience, means and materials.

In this respect there are at least two reasons to be puzzled.

The first derives from the fact that the experience on volunteers carried out so far shows that in our country the latter are not enough. I must mention that at present we have been unable to find even the small percentage provided for by present law.

The second is that quality improvement is a constant demand imposed by technologic development and is not, as often stated recently, an acceptable counterbalance to the reduction of forces.

A quality improvement does not place us in better or more important conditions as regards the others because all Countries which intend to safeguard their security, in the West as in the East, are endowed with modern means. Modernization is, for every organization, a tax on efficiency which, like all taxes, if not paid in time, will sooner or later present retroactive bills. It may be seen as a counterbalance to quantity only in the presence of exceptional increments, which go beyond our national possibilities and are, however, in contrast with the

idea of saving at the basis of this reasoning.

Excluding all other considerations of an ethical and technical kind, it is a fact that those who demand a professional army and rapid improvements in quality must realize that greater resources for defence are required and that this is rather unlikely and, however, in disagreement with the reasons placed at the basis of the changes.

There are also more moderate, though not more coherent, opinions which demand an increase in the quantity and quality of volunteers as a counterbalance to reduction of the term of service.

I have already said that this increase is no easy matter. National reality has, in fact, underlined that only a small part of the citizens adheres to voluntary service and that this is to be found among those with a low cultural background devoid of other alternatives. Moreover, if we consider that there are other structures which draw volunteers and which are far more attractive than ours, such as the State Police, the Carabinieri, the Fire Brigade and so forth, we may easily understand that the fallout on the Army is very low.

The result is that, in the present situation, the better quality of the available ranks coincides with the offer of enlisted personnel and not with that of volunteers.

An increase of the latter - which is still farfetched - and a reduction of the term of service of enlisted personnel would involve the employment of volunteers in operational tasks thus limiting enlisted personnel, that is the best personnel, to accomplish support tasks.

The repercussions of such a solution would be remarkable inside and outside the Armed Forces. Suffice it to think, for example, that a higher component of volunteers would continue to flow to the socio-economic areas of the country having a high unemployment rate, that is to the South. In this manner we would create difficul-

ties for those units such as the Alpine Brigades and the Lagunari which already have to draw from regional enlistment and which are the more celebrated and those nearest to the heart of the people as proved by the genuine and high adhesion when national meetings are held.

It may be easily proved that at present any reduction of the term of service would give rise to important negative implications.

Firstly as regards costs, an eventual reduction of the term of service from 12 to 9 or 6 months, involves clothing, equipment and training of a proportionally higher number of soldiers in the span of a year.

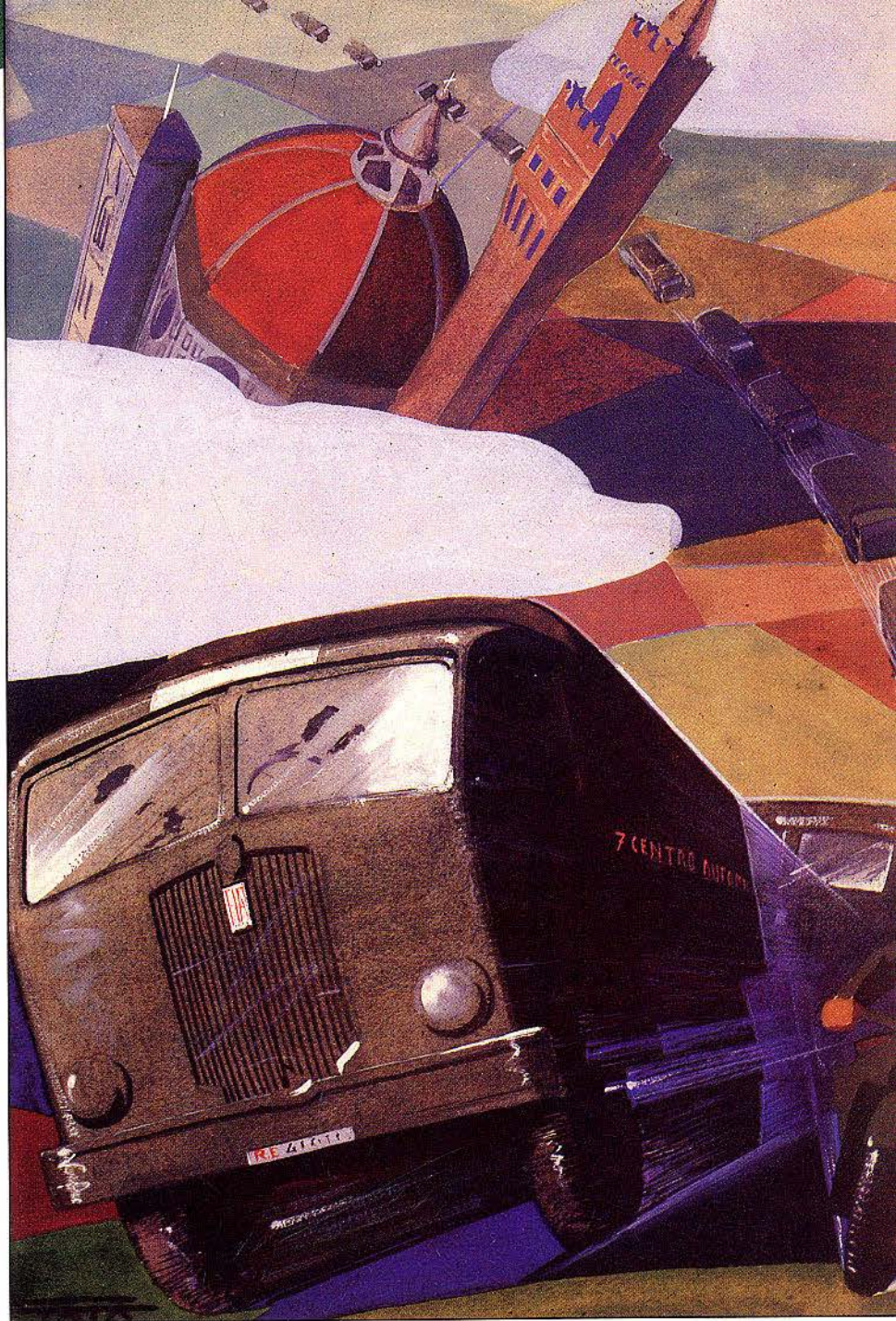
Moreover, the vented, great availability of valid (physically, psychologically and culturally) volunteers does not really exist.

Furthermore, this solution would not put an end to the alleged frustrations of enlisted men, bound, essentially, to the fact of having to join the Army no matter how long the service may last.

And yet, the constant accusation is that the Army is scarcely professional, is a waste of time for our soldiers and does not give them a suitable formation. Indeed, if this is true, if the results of a year's service are not very convincing, what could we hope for a six months' service?

Those who support such a service surely intend six months of intense training, but to achieve this we would need more firing ranges, more training areas, more means, endless ammunition, etc. A series of conditions, that is, which are in striking disagreement with what our Country actually offers. Moreover, no one ignores that a six months' service would offer, at best, "seasonal" soldiers trained only, that is, either for the summer or for the winter.

In fact, in the present situation in which every exercise is met by a protest or by the intolerance of vast layers of the population, the "reduced" enlisted soldier would

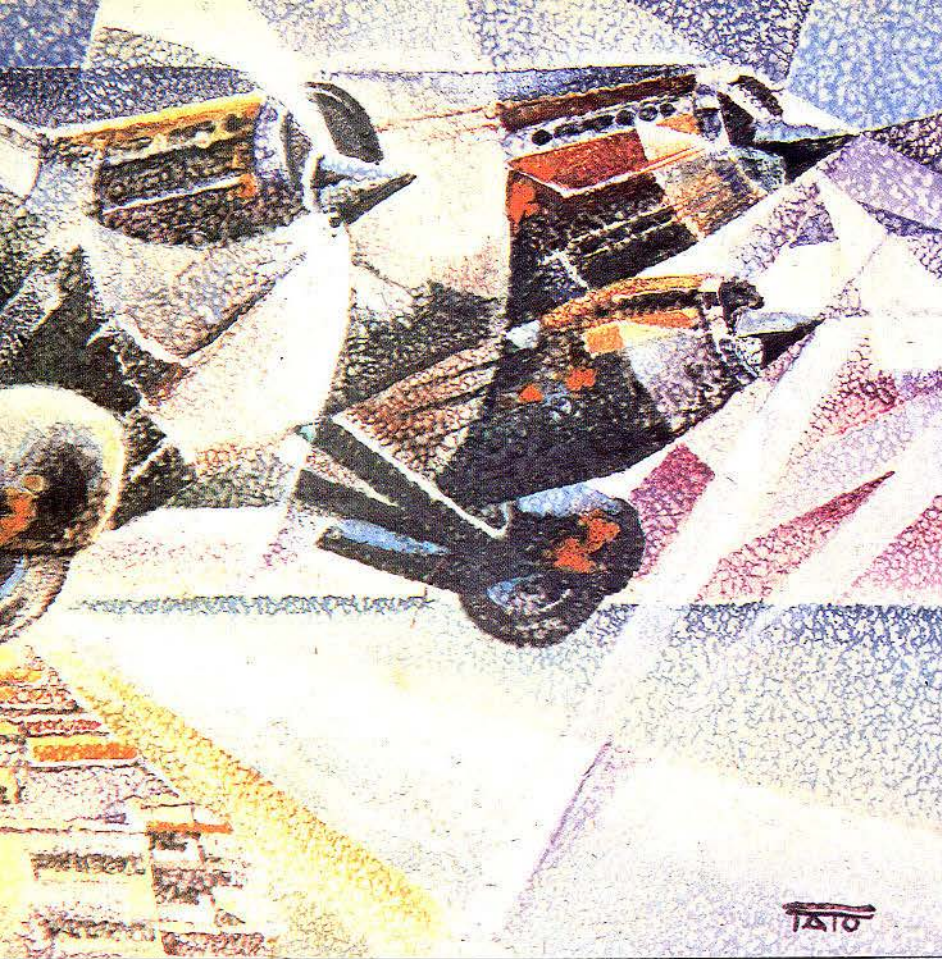


wind up by doing even less than his predecessor, with relative frustrations and, I repeat, higher costs.

It is thus my duty to underline that if enlisted personnel were to be employed on operational tasks for shorter periods than at present the operational capacity of the Army would likewise be reduced. The effects on the credibility of the military instrument are evident and all negative in the light of the present tasks of the Italian Armed Forces and of their role within the Atlantic Alliance.

By this reference to Nato I wish to emphasize the fact that any decision as regards the defensive pattern cannot ignore the international situation of which Italy, by its own choice, is part.

There is more to it, however: the European component of the Alliance is moving towards the 1992 deadline when the financial and economic aggregation could be the beginning of an actual political and defensive union. On many parts, in authoritative forums pressure is being made for a more incisive and



specific European role of security which, we may say, is the logic consequence of the reduction of the military confrontation between the United States and the Soviet Union on our continent.

This trend requires, on the Italian side, a military structure suited to its political and economic role and homogeneous with that of other countries in terms of both quantity and quality of personnel and of operational capacity. Nowadays, to think of reducing the term of service to six months would make us unprepared and imbalanced for the above mentioned deadline, thus running the risk of having to take some steps backwards which would be highly unpopular.

Thus, the idea of reducing the term of service seems, as things are at present - an expensive solution and, what is more, unsuitable and untimely.

In this brief analysis of the situation I have synthetically examined the prioritarian issue of personnel, but the debate under-

way in our country on the important subject of defence has spread out to all fields of interest, from technologic research to industry, from infrastructure to state property, up to the very structures and tasks of the Armed Forces.

The above, moreover, with a series of forecasts and proposals which often have nothing to do with a serious security policy.

In the light of the above, we may wonder why public opinion, very mature in many ways, does not realize that certain attitudes, taken up with markedly populist aims, not only delay the process of rational adaptation of the military instrument but, above all, conceal the actual requirements of security and defence from the citizens' eyes.

In fact, in our country we too often prefer to intercept easy consents by putting forth simple though approximate and contradictory solutions instead of developing an organized debate on this complex subject. The result is that the subject of defence is not taken

seriously and is thus not considered a real problem.

This brings us to consider that in our country the level of perception of the threat has fallen and that we are in the presence of a generalized refusal to face the reality of the problem of security.

A reality which exists and is, indeed, particularly consistent; otherwise, why would all the other Alliance member countries be concerned about it... and, of course, not in a superficial manner?

LANDMARKS AT THE BASIS OF THE DEVELOPMENT

Considering a few objective deficiencies of the Army and a certain "ideological" confusion characterizing the present period which is an obstacle to a better understanding between the Country and the Armed Forces, it seems however that we may spot and identify the basic elements on which opinions generally agree and which represent the landmarks of the development process of the Armed Force.

These elements are the following:

- the observance of the Constitution;
- the observance of the treaties, at NATO and European level;
- the national link with the current disarmament process;
- the will to cut Defence expenditure;
- public opinion's demand for attention and consent;
- the absolutely necessary role the Armed Forces will continue to have in the geopolitical context of the year 2000.

These elements together allow us to think that we shall continue to have a compulsory service, perhaps open to women too, to be integrated by volunteers for those tasks requiring a longer period of service more than a greater professionalism.

We shall therefore tend to increase the number of volunteers, but

even this will not be easy for the reasons previously underlined. A possible solution to the problem could be that of rewarding volunteers with vocational training - and ensuing privileged hire in the State or in industry - instead of only giving them a wage. The above seems to agree with individual expectations as well as with those of the national economy which is always scarce of skilled workers. The present offers of the Service aim in this direction.

Moreover, the Army will have to be kept on levels of a good consistency, as the diminished credibility in the employment of nuclear weapons - which is characteristic of the present period - presupposes the revaluation of conventional weapons. This provision involves longer services and higher costs. The latter are unpopular and surveys carried out so far on the issue have been closed up in their drawers. Without increasing the number of conventional weapons it seems however necessary not to reduce the Army to very low levels as regards size, both because it is a tested, low cost organization ready for all emergencies without equals in the country and because the operational role of the Armed Forces and of the Army in the year 2000 remains important especially because the potential threat coming from the East still exists. In the East good intentions cohabit with 5 million men at arms and 9 million well trained reserves.

True, East-West relations are improving. NATO deals with the Warsaw Pact on many occasions and progress is evident, but it is also evident that the advantages of this will be felt only in the distant future.

The destruction of nuclear weapons just as the reduction of armaments are slow and controversial processes. Moreover, the most delicate stage of disarmament has still to come: I mean the one following the signing of agreements when it will be necessary to reduce, organize, control and guarantee



that the new balances at the lowest level be respected by everyone.

At the same time, in the Mediterranean theatre, détente between East and West, should it be accompanied by a drastic reduction of the United State-Soviet Union confrontation in the area, could give new space and vigour to nationalistic temptations which at present seem checked, rather than appeased, with all the direct and indirect consequences on the stability of the area, on economy and on the development of our country.

Thus, the problems regarding national interests bound to the Mediterranean continue and will most likely continue to exist and this makes it necessary to prepare a credible response which is both political and military.

The threat coming from the South is exquisitely "national" and, though not alarming militarily speaking, could likewise become of great embarrassment if a crisis - deprecable but always possible - should not be faced with the readiness and the efficacy required of

the Army of a developed country such as ours.

According to me, the South should have an almost automatic reactive capacity, linked to an excellent intelligence service capable of updating us on the intentions of other countries and on the likelihood of critical events.

Due attention must thus be paid to the South without however forgetting the priority demands of the North-Eastern Theatre where, no matter what the development of the international situation may be, its very geostrategic formation makes it a more plausible threat to the territorial integrity of the Country.

In view of the above and convinced of the substantial validity of the present NATO doctrine, the Italian defensive concept and its doctrinal formulation cannot but remain faithful to the criteria of advanced defence because of the above mentioned coherence with NATO and because of the safeguard of the territory and the population of the area and because



the alternative to in-depth defence, tied to low degrees of operational readiness, to a desophistication of equipment and to organizational order of a militia type, appears to be a problem in the national context and cannot guarantee the Country an adequate security.

As far as I am concerned, as responsible representative of the Army, I am firmly convinced that the tecnico-operational choices made so far have been correct and that their validity may be confirmed also as regards the future, in the medium run at least.

There are, moreover, other tasks which have proved no less important: on the inside, the support in public calamities and public peace; on the outside the ability to continue to assure the role of mediation and peace which Italy has long

been carrying out successfully in the international field.

I refer to the ever more frequent interventions that our Armed Forces - the Army in particular - have been summoned to carry out to reduce tensions and favour a return to normal conditions in the many areas of conflicts still present in the world. The latter is a task which we are particularly proud of, not only for the success obtained, but because it confirms the importance of the Armed Forces as an instrument of peace and stability.

If this, on the whole, seems to be the role required of the Armed Forces and, thus, of the Army of tomorrow, the programmatic lines which are at present being followed and which I shall summarize below, preserve their full validity:

- maintenance of a deterrent

capacity suited to the evolution of the international strategic situation;

- in case of a further reduction of the force at arms, as unrelentingly occurs every year (this year a decrease of 16,000 men), aimed interventions in sectors of relative redundancy (central organization and logistic, administrative, school and training support) and, lastly, suppressions or contractions to cadre of certain second formation units;

- gradual revaluation of the mobilization aimed at supplying the units concerned with arms and equipment as similar as possible to those of the existing units;

- levelling the still existing functional deficiencies and carrying out the modernization projects according to the supply programmes which have long been identified, foreseeing, within the financial availability considered, a further dilution in time;

- maintenance of the present term of service at least until Eastern countries and Atlantic Alliance members carry out similar substantial reductions.

Another important element to be considered in advancing proposals is the financial resources available.

Resources assigned our Armed Forces up to now have been very scarce, decidedly inferior to those of other Alliance member countries and it is now absolutely necessary - beyond considerations of a politico-strategic kind - to reduce them further in order to be able to keep the pace as regards technology.

It is impossible to work miracles in this field. If, as it seems, the Armed Forces of tomorrow will have to continue to guarantee security by deterrence essentially, they will have to be credible and this implies resources and consent.

Consent as such is no "romantic" demand; it is, instead, the necessary presupposition for finding resources, for a tighter functional connection with the rest of the country and for a more profitable contribution, in the operational

field, of part of a military population which, as I have already said, seemed doomed to decrease and, at the same time, to share increasing responsibility and tasks.

The above consent should not be sought by granting what cannot, in a responsible manner, be granted; on the contrary, it should be gained through the results achieved, through transparency and constant information on what is being done and on the reasons that make it necessary.

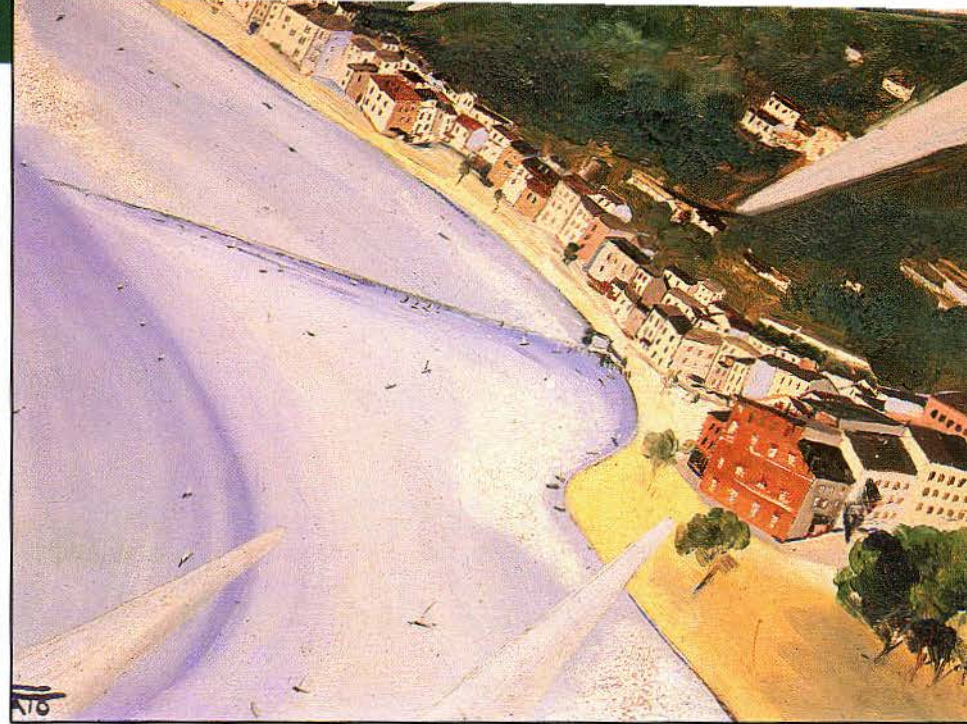
THE ARMY OF THE YEAR 2000

The above outline allows us to identify the particular characteristics of the Army of the year 2000, which is foreseen reduced as regards the present one and which we shall render functional and in line with the demands.

On the basis of the above we may state that the operational component of the Army may be conceptually divided into three blocks of units:

- Covering forces for first formation advanced defence especially in the North-East;
- Forces to be completed with mobilization, to guarantee operational capacity and the necessary supply;
- ready intervention forces to guarantee freedom of action and manoeuvre throughout the territory. The latter will have to have all the necessary ingredients to be readily efficient in the widest possible range of situations. I refer to the highest organizational and professional levels as well as to tactic and strategic mobility and to the quality and quantity of means and materials.

In sum, the high likelihood of a reduction in quantity of the military confrontation between the two blocs, lets us believe that, should the necessary will exist, we are in a condition to adapt the Italian defensive apparatus to that of other NATO European Coun-



tries without having to add too many costs.

Reduced forces may be more easily modernized with the small resources available and a suitable and gradual mobilization could give the necessary consistency to the military instrument in case of serious emergencies which may continue in time.

Moreover, an improved functional link with the total potentiality of the country would give its role full credibility and greatly increase its dissuasive capacity.

It must be clear however that the real reason which makes the above reduction absolutely necessary is the inadequacy of the financial resources and this not only as regards the Army, but as regards all the Armed Forces.

As for the fact that a re-sized instrument must continue to correspond to the role our country wants to have within NATO and autonomously, is something for politicians to decide and be responsible for. Technicians, instead, will have the task of managing as best they can what has been assigned to them by precise and motivated proposals.

However, the effort of the entire country, at least in terms of attention, is necessary to reach the

reduction and quality improvement of the Army.

There are many sectors of intervention within the Armed Force. As regards quality, for example, we cannot continue to have the macroscopic deficiencies mentioned above. These must be removed through a general reorganization whose economy will have to concern the entire instrument and not, as in the past, almost exclusively the operational units.

As regards the rational employment of human resources, it will be necessary to reduce commands, also because the present organization seems too tied up with bureaucracy. The ideal would be to be able to evolve towards joint-force integrated commands, but it seems difficult to promote, in only a few years, a similar "Copernican revolution" if the structures of the Armed Force are not first simplified. At the same time, the operational units will have to be adequately strengthened in terms of personnel. At present, these units are ever more like "empty boxes" due to the gradual scarcity of the Cadres and the continuous cuts to the balanced force.

I fully realize that the above provisions will be deemed highly unpopular by the following:

- the military Cadres because "routine", considered comfortable, will have to be removed and there will be less room for generals;

- the local population, for we know very well that the reduction or elimination of commands and units uncover mutual tradition, long lasting social relations and precise economic interests.

Unpopularity will further increase when technico-administrative structures are touched and it becomes necessary to cut on civilian personnel. However, there will have to be a reduction and it will have to be harmonious and functional, first on what is accessory and later on the essential and it will have not been performed in the past.

Actually, we must reorganize ourselves, no matter what the present situation is, and we now seem to have the opportunity to do it in a managerial manner: structure, personnel and modernization must be re-examined in the light of the social capital available (resources) and of production (role and tasks).

The Army, within the Armed Forces, is ready for this reorganization and has in fact already started it. However, it asks that, contrary to what has happened in the past, this reorganization be respected as regards principles and aims.

Every choice and every sacrifice will have to be organized in view of improving the Army in a regime of economy, bearing in mind, in a harmonious manner, the other components of the military instrument and the civilian component of the Defence rejecting all temptations of a welfare kind. In fact, the effort must aim exclusively at regaining competitiveness in Europe, taking advantage of the favourable atmosphere of international détente.

The above is the "project design" of the Army of the year 2000. What we can actually do to link it to present demands is to meet, as far as possible, those de-

mands which aim at making the military service less burdensome, well realizing however, that its "tribute-like" nature will never arise enthusiasm. I refer to regionalization, to a vaster distribution on the national territory of the onus deriving from the utilization of training areas, as well as of the advantages given by military settlements; this, possibly from a jointforce point of view.

A project which is mainly aimed at seeking a higher efficiency within a severe management economy and a more direct dialogue with public opinion in order that it may feel and understand the objective needs for defence which the Army will try to satisfy with firm and responsible consistency.

CONCLUSION

There is nothing basically new in the above, nor could there be: the Army, like all big organizations, needs to be changed gradually. Serious crises may otherwise ensue.

The novelties, if they may thus be defined, are given by the meditated choice of two operational indications only apparently in contrast: the research of a contest and the courage to change. We are certainly not lacking in courage, but if we want it to produce effects in terms of change, it must find in the political authority and in public opinion ideas which are clear and not, as already said, instrumental oppositions bound to myriads of particular situations. Those, for example, which have perverted the nature of the Armed Force's previous attempts at a reorganization.

I am sure that this logic will finally be understood, just as I am optimistic over the fact that the great majority of our population will once again take on the fate of its Army as if it were its own. A mature public opinion, which looks onto environmental problems in a responsible manner, cannot remain insensitive to the problems regard-

ing the safeguard of Italy and its role in Europe and in the world. It will thus be in a position to overcome the old prejudice according to which national Armed Forces are the synonym of war and violence and will, instead, be able to relate them to the opposite idea: the defence of peace and of development.

A vital objective which the Army today, and more so in the year 2000, wants to continue to safeguard in an ever more productive manner and at lower costs, to deserve the appreciation of the citizens from which it draws its most intimate reason for its existence.

The signals identified at international level make us believe that the basis for the gradual reduction of the military confrontation, at least between NATO and the Warsaw Pact, will become stronger.

As regards our country, we hope that similar signals can favour the consequent evolution being carried out in the Armed Forces and in the Army in order to be able to face the demands of a long term future and not only of the year 2000.

If this is understood, I am sure that our country will give us the strength it has never denied a legitimate cause.

Domenico Corcione

**THE ARMY
WITHIN THE
DEFENCE
PATTERN OF
THE YEAR
2000**



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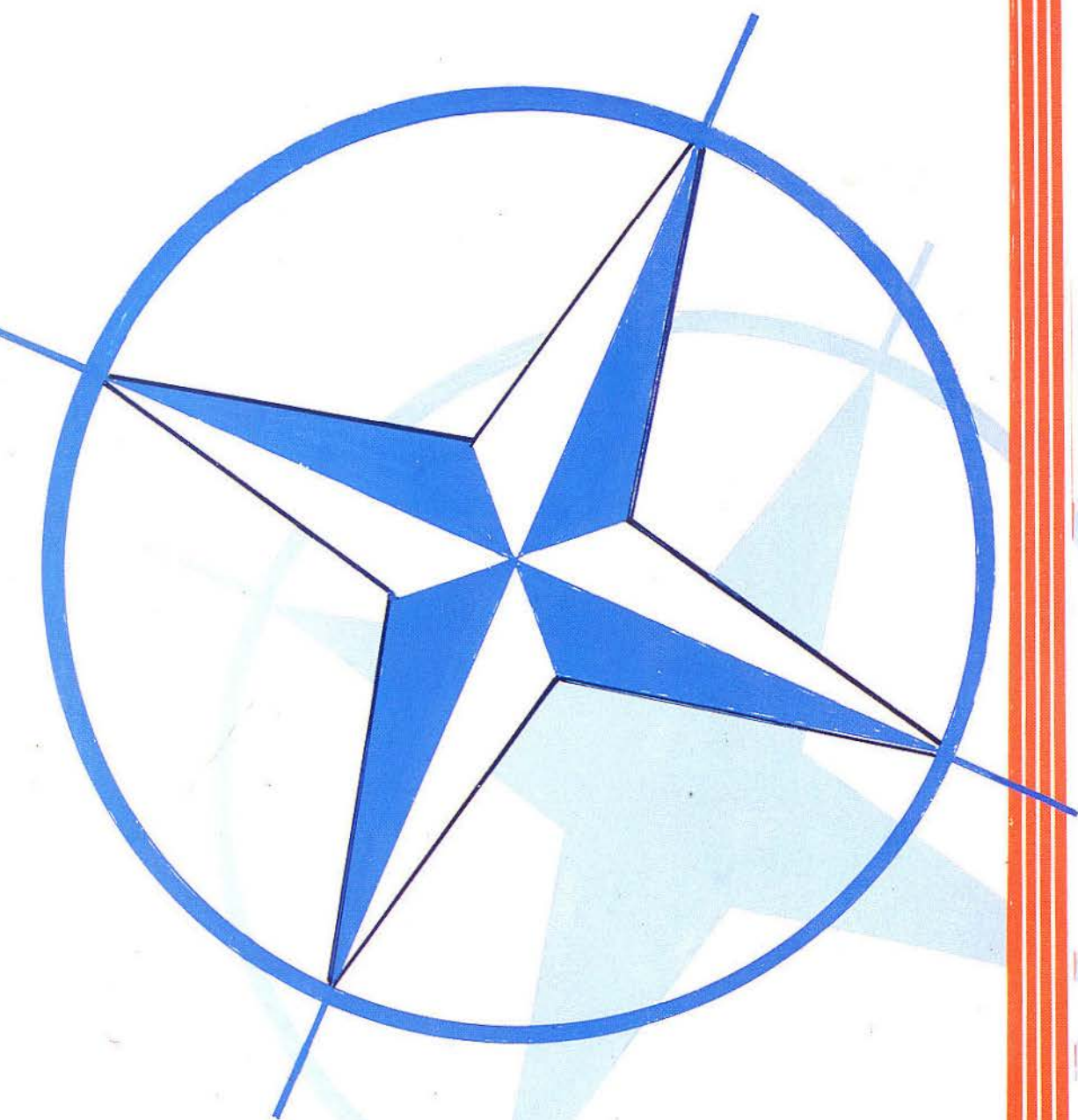
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NATO

40 YEARS OF PEACE AND PROGRESS IN SECURITY



The Atlantic Alliance is 40 years old.

It was officially established on 4 April, 1949 and the membership was signed in Washington by the representatives of France, Great Britain, Belgium, Holland, Luxembourg, United States, Canada, Denmark, Iceland, Italy, Norway and Portugal, joined by Greece and Turkey in 1952, the German Federal Republic in 1955 and Spain in 1982. Created to face the threat of the Red Army, on a war footing behind the iron curtain, ready to launch itself against a new offensive aiming at conquering Western Europe, the Atlantic Alliance has so far fulfilled its task of safeguarding the independence and the freedom of member countries, guarantee peace and favour political consolidation and economic development in the aftermath of World War II.

Soviet expansionism has, in fact, been blocked; war on the European continent has been avoided; independence and the democratic institutions of allied countries have been safeguarded. Europe has been experiencing the longest period of peace of its history and this has allowed the West to achieve an economic development, an accumulation of richness and a high, generalized and widespread degree of welfare unprecedented in history and having no comparison with other areas of the world.

Nowadays, forty years since its establishment, almost to prove its validity and vitality despite almost half a century marked by intense and rapid changes, the Atlantic Alliance seems to be on the point of achieving its essential institutional aim: a solid, stable and secure peace (not only that of avoiding war) by means of friendly cooperative relations and a balance of forces with the enemy coalition of States, that is with the Warsaw Pact and the leading super power, the Soviet Union.

In brief, we could say that the Atlantic Alliance has won the "cold war" against the Eastern bloc and wishes to consolidate this victory, not only for itself and those people who follow the principles and the ethical values of the West, but for mankind as a whole.

The new Vienna negotiations on conventional disarmament in Europe, together with the Geneva negotiations between the United States and the Soviet Union on the 50% reduction of their respective nuclear strategic arsenals and other Geneva talks on the definite and general ban of chemical weapons, represent the historical events and the political instruments for the achievement of this aim which may be considered the final objective, for the final years of this century, of a policy carried on with great de-

their civilization, based on the principles of democracy, on individual freedom and on the sovereignty of rights, concerned with favouring in the region of the North Atlantic welfare and stability, determined to join their efforts towards collective defence and the upkeep of peace and security, have reached an agreement on the present North Atlantic Treaty".

From the above words we understand that the Alliance member countries engage in working together in the field of foreign and military policy and join their efforts for the defence of ideal mutual values and for the stability of democracy as well as to favour the harmonious economic and social development of their peoples. To draw a balance of these last forty years we have to examine if and how the above aims have been achieved.

violence, ruining and making victims among the workers, police forces, State, authorities and "businessmen".

While the Red Army was pressing at the boundaries with the West and stopping all attempts to free the occupied countries, demonstrators with red flags cried "Ha da veni baffone" (The man with the big moustache is going to come)", referring to Stalin's moustache), as if promising that Soviet communism would have brought welfare and prosperity to our population together with social justice and a new form of freedom which should essentially have been "freedom from need" which the "dictatorships of the proletariat" would have guaranteed to everyone.

After several years when the attempts at transforming trade union fights into revolu-

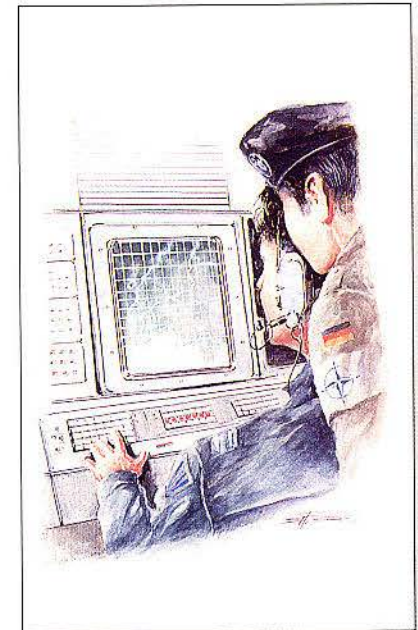
THE IDEOLOGICAL VICTORY AND DOMESTIC POLITICAL STABILITY

As an introduction to the survey of the successes achieved by the West which have led us to the threshold of a unique negotiation on "ideological reconciliation" with the Eastern world, of which I shall speak later on, I must mention that the challenge issued by the Soviet Union at the end of World War II to the Western countries, formerly its allies, was a global and worldwide challenge.

Global, because it concerned every field of human activity, from the pure expression of thought (philosophic, religious, artistic, scientific), to the organization of society, the production of goods, etc.; worldwide, because it extended to every corner of the planet and right into space, involving all the people in an attempt to impose a political supremacy.

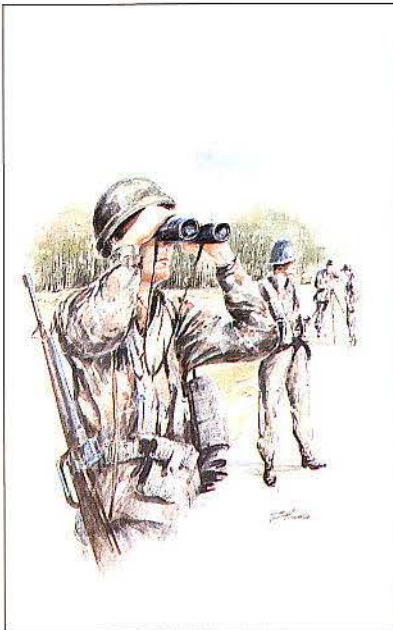
The inspiring principle of this challenge, turned into a violent and ruthless fight and into long, cruel wars and local guerrilla warfare, was the "Marxist revolution" which should have set the world ablaze, free the people oppressed by capitalism or enslaved by colonialism and destroyed Western democracies as the starting point for the establishment of communist or pro-Soviet regimes. The war between the low and the middle classes was the instrument of the revolution, according to Marx and Lenin's theory which believed a war between communist and capitalist countries inevitable and a basic element of the final communist victory over the world.

This fight which for the young generations may now seem more the object of historical culture than of political interest, even though some terroristic groups are still imbued with its principles, penetrated streets and squares, factories and farmlands, taking advantage of the justifiable claims of workers, in periods of great economic difficulty which followed the destructions of war, to force the hand of governments, upset the democratic game of the parties involved and undermine institutions. It caused great upset and extreme



tionary primers in the Western countries failed and Stalin's crimes were denounced by his successors and the establishment of a new man and of "communist society" which Marx had envisaged as the last stage of the transformation process of socialism also proved a failure, the most important Western communist parties abandoned revolution and accepted the democratic development of society, considering waned the ideology myths. At that time many people saw in this the failure of communism (1) but not the victory of the Western ideology.

Nowadays, however, the original idea of communism has little grip on the new generations and the Soviet model is believed totally inadequate and inefficient by the very Moscow leaders themselves and it is no longer mandatory for the other countries governed by "brother" parties. Nowadays the various Marxism based regimes are looking for ways to stimulate private enterprise, to give rise to forms of pluralism and



termination and extreme coherence for four decades.

Such an important anniversary must obviously be the opportunity to draw a balance, but a balance needs to be compared with the past and with other "competitors" in order to be able to draw "omens" for the future. This is the aim of this article meant to outline the most important events and successes obtained by the Atlantic Alliance in the most varied fields and to underline the determining contribution to "mutual security" given by the Armed Forces of NATO during the past forty years.

In this respect, we must mention the aims of the Alliance as indicated in the introduction to the North Atlantic Treaty which says: "The States taking part in the present treaty in re-confirming their belief in the aims and principles of the UNO Statute and their desire to live peacefully with all the peoples and all the governments, determined to safeguard the freedom of their people and

democracy within their trade union organizations and within political party and state bodies and study the economic structures of the West which are imitated by communist or marxist countries whether aligned or not as well as by countries having different regimes of the second and third world. We may thus state that the ideals of the West, as regards freedom and the right of man and peoples, the independence and self-government of states and economy based on free competition have won.

They have prevailed in the West due to the free choice of citizens expressed by means of elections; they are prevailing in the East and elsewhere because they are believed to be more valid and efficient, at least as regards the recovery of the "state economies" themselves in severe situations of crisis, even though their political leaders have not yet relinquished, officially at least, the creation of the "communist society" as the final objective.

However, what is unique is that the ideological victory of the West does not hoist the colour of a single philosophical or conceptual flag, because "the freedom" with the ensuing "Plurality" of ideas and parties is the basis of its thought, its way of being, living and letting human society live.

We may thus speak of democratic liberalism and capitalist neoliberalism and of democratic socialism as well, convinced as we are that there is room enough for all ideas and for all forms of state and society, provided we do not try to impose one's own principles with violence and, by virtue of these principles, repress and suppress the ideas of others.

To those who miss the guaranteed and safe order of the past, who remember the years of fighting and of socio-political contrasts of the post-war period, it may seem strange and false to state that also for those Western European countries which had just reached democracy such as Italy, freedom had become a guarantee of stability.

This however is true, especially if we draw a comparison with Moscow satellite countries, in so far as our system allows opposition to criticize and to govern when they reach the majority, permitting a smooth political transition from one leadership to another. In totalitarian regimes, however, opposition must necessarily change into revolt if it wants its criticism to be heard and transformation becomes rebellion if it is not agreeable with the leading superpower and this leads to repression and violence and bloodshedding as happened in East Germany, Poland, Hungary, Czechoslovakia even with the "brotherly help" of the allied countries' tanks.

Stability in Western Europe, which is not immobility, but peaceful evolution, is also the result of a spontaneous educative process of the people and of political forces, together with the result of the substantial improvement of the standard of living and welfare, made possible by the quick economic development.

Nowadays the people of Western Europe live in regimes of consolidated democracy where, however, all the problems of modern society have not yet been solved. However, such regimes guaranteed freedom, welfare and development and the opportunity of researching and applying the most appropriate solutions to these problems without violence and in conformity to the choice expressed by the people's will.

ECONOMIC DEVELOPMENT AND SOCIAL PROGRESS

In the framework of a non declared and indirect war between the two worlds, economy has certainly been the battlefield on which the confrontation has been the har-



shest. The favourable result for the West, however, has opened a wider outlook of new development and new relations with the East, unthought of before.

The respective ideologies also faced each other in this field, together with the opportunity of extending one's political influence to non-aligned countries and especially to developing countries in need of help, the capacity of the respective military potentials and, finally, the future of the two empires.

The Marshall Plan, proposed by the USA in 1947, which anticipated some of the aims and contents of the North Atlantic Treaty, as it was designed to favour the reconstruction of Europe also to put in a position to resist the internal and external pressure of Soviet communism, somehow represented the first economic "offensive" of the West.

As stated by article 2 of the Treaty: "the underwriters will contribute to the development of peaceful international relations..., developing the conditions necessary to

guarantee stability and welfare. They will make an effort to eliminate all contrast in their international economic policy and will favour mutual economic cooperation".

Moreover, in its organizational and functional structure the Alliance has always given primary importance to the economic development of member countries, both for the contribution given by economy to security and for the fact that the citizens' welfare is a further element of cohesion and strength. In fact, economic consultation has become one of the daily activities of the national delegations which represent the respective countries within NATO even if the latter has never wanted to replace other international organizations or impose a supernational will, bearing well in mind that the initiative and free competition of the single nations are considered the most useful means for economic development.

Contrary to what Krushchev had promised after his visit to the USA regarding the Soviet production which, according to him, would have exceeded that of the USA within twenty years, the West's market economy brilliantly faced the challenge against the centralized economy of Marxist regime countries.

The present total production of NATO countries is three times that of Warsaw Pact countries and even that of Western Europe alone is far superior to that of the Warsaw Pact, though the Soviet Union alone has a far greater supply of raw materials.

Moreover, the Warsaw Pact countries, headed by the USSR, continued to operate, after the end of the war, by means of a kind of war economy which favoured heavy industry and war production and it must be mentioned that military expenditure absorbed from 12 to 18% of the GNP, while for the Alliance member countries this percentage decreased to an average of 6-4%. Such economic choices, dictated exclusively by the political and military objectives of communist countries, obviously resulted in great sacrifice for the people and they certainly did not favour material welfare and the improvement of the standard of living, which remained far lower than in the West.

In fact, in the last ten years there has been a slackening in the availability of consumer goods, especially as regards foodstuff, while the workers' buying capacity has had no effective and substantial increase.

Moreover, the proof of the economic failure is underlined by the huge quantities of agricultural produce they have to buy from Western markets to guarantee nutrition and by the research, purloining and purchase of know-how in the most varied fields of production, though in certain branches of scientific research and of technological application where the politico-military interest has achieved a concentration of efforts, the USSR is not backward or is in the vanguard.

The possibilities of a further separation between East and West in the field of economic development, while new technologies and new automatic production systems gave rise

to an increasing development in market economy countries, convinced the leadership of the communist world to make friendly approaches for a reconciliation with the West, to obtain the help needed to improve their depressed economies.

This is exactly what happened with Krushchev's first detente and even more with Breznev's second detente which, among other things, aimed at employing the Western and Eastern (Japan) "capitalists" financing to exploit the great potential resources of Siberia. This is what is also happening with Gorbachev's third detente which bears the name of "Glasnost" and "Perestroika".

It is certainly unnecessary to insist on explaining Gorbachev's intentions in this respect, as mass media have widely spoken about them. I believe it is enough to say that he understands that a further widening of the gap between the economies of the two coalitions and the politico-social system which contend over the dominion of the world, would lead within a few decades to the final debacle of its empire, even without direct armed confrontations on the battlefield, and that to continue to destine a great amount of resources to prepare to win a world war - unproposable nowadays - is useless and dangerous.

This was the reason for the change in the domestic, economic, military and international policy of the USSR and this is the mark of success for the policy and military strategy of the Atlantic Alliance.

POLITICO-MILITARY SUCCESS

Though the leading character of the new course in international policy towards the reduction of the conflictuality in the areas of tension and towards a reconciliation between East and West and a controlled disarmament of the two blocs, seems to be the great comrade Gorbachev, this event is in fact due to the policy constantly followed by the Atlantic Alliance.

It is the policy sanctioned in 1967 by the so-called Harmel report, which may be summarized as follows: to arm only to dissuade, and negotiate to disarm.

And this is what the Alliance has done so far and continues to do, with the justified hope that the result of negotiations underway and the further development of East-West relations crown the favourable results already achieved.

It is rather sensational to hear the Kremlin leader state:

- "class warfare on an international scale is no longer at the basis of the USSR's foreign policy", because the interdependence of human activities nowadays raises the problem of the survival of mankind above the interests of the single peoples;

- thus, war between the communist and the capitalist world is no longer inevitable, contrary to what Lenin stated;

- therefore, the Soviet military policy of

the past aiming at achieving a clear superiority of forces over the combined forces of the potential enemy, is no longer necessary;

- the new military doctrine of the Warsaw Pact is based on the idea of a reasonable sufficiency of forces with exclusively defensive aims;

- it is necessary to denuclearize, eliminate inequalities between opposing conventional forces, reducing those that are superior to levels inferior to the existing ones and change them into exclusively defensive forces.

- world public opinion was impressed when it realized that these words were accompanied by important facts such as the following: the withdrawal of forces from Afghanistan, the signing of the Treaty on the elimination of intermediate ground based nuclear missiles, the promise of a reorganization reducing the Armed Forces of the USSR and its satellite countries by about 10% as regards personnel, 20% as regards tanks and artillery and 13% as regards fighting aircraft, together with the commitment for a total elimination of its own arsenal of chemical weapons and the effective efforts, made together with the USA, to bring peace to the areas of war.

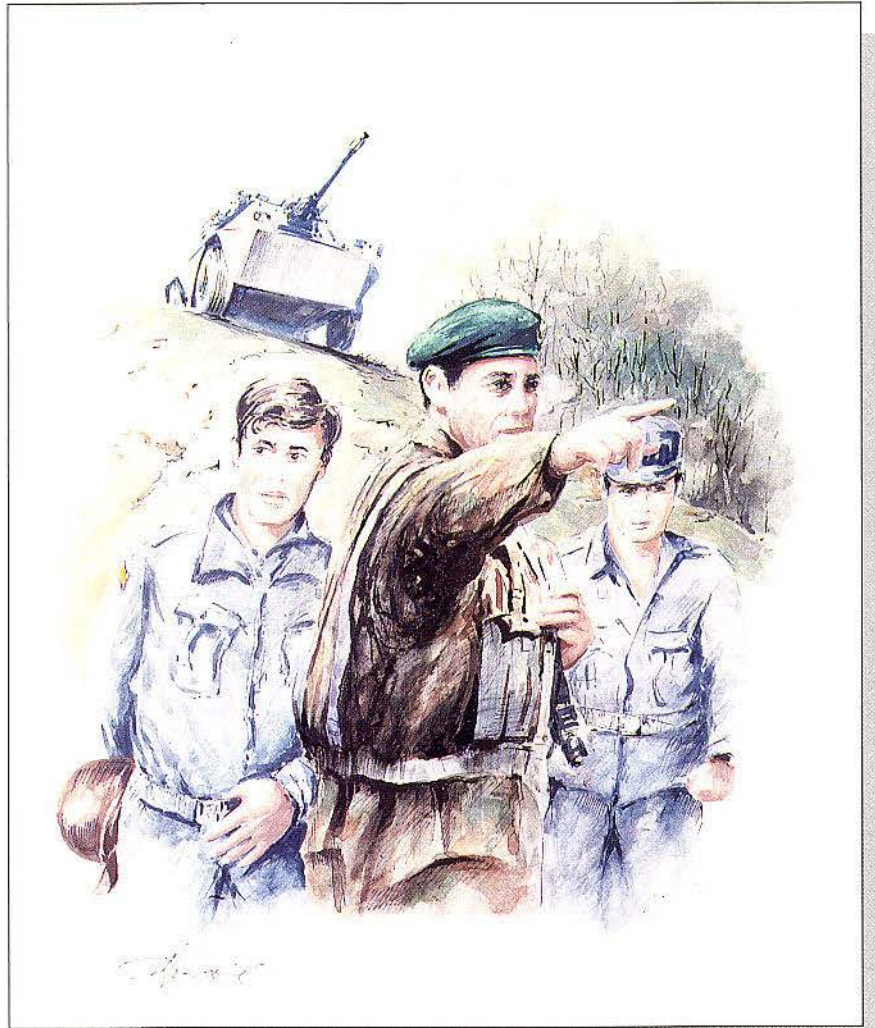
All the above, however, corresponds to

what the countries of the Atlantic Alliance have been carrying out, demanding and proposing for years to the leaders of the Eastern bloc, without ever been taken into serious consideration, except for particular sectors and proposal from which the Warsaw Pact could draw some political or strategico-military advantage (see for example the limitation of nuclear-strategic weapons and the anti-missile defence dealt with during the Salt 1, e and ABM negotiations).

If, by means of an adequate policy of security, NATO had not prevented the Soviets from employing their forces or imposing their will, we would now be either slaves or destroyed.

In fact, before the changes to Soviet policy made by Gorbachev, USSR expansionism and hegemonic tendencies had already suffered various deadlocks, also as the direct or indirect result of the policy of the Atlantic Alliance.

In fact, the presence of the Alliance and its Armed Forces, besides preventing the Red Army's further advance into the territories of member countries and contributing to stop the attempts at subverting communism from within, implicitly guaranteed



neutral or non-aligned countries too. It gave, for instance, an indirect support to the resistance of Yugoslavia against Stalin's attempts to enthrall it (1948-50) and his expectations of obedience; it implicitly favoured the separation of Albania from the Warsaw Pact (1968); it helped in stopping the Berlin block (1949) and in preventing further attempts of that kind and stopping Yugoslavia's ambitions regarding Trieste; it gave support to Egypt when the latter decided to break its bond of friendship and cooperation with the USSR and drive advisors and Soviet ships from its territory; it has been an example for the establishment of similar defensive alliances with tasks of anti-expansionism of the USSR in other parts of the world (SEATO, CENTO) and represented a support for the latter; it also gave a direct and indirect contribution to restrain the various Middle East conflicts and re-establish conditions of peace and truce, stopping the USSR's attempts at infiltrating into the area.

On two specific occasions, the Atlantic Alliance stopped an intimidating manoeuvre of a nuclear threat towards the West aiming at separating America from Western Europe; the first, in 1962, when the Soviets tried to install their missiles in Cuba to place the big American cities under fire and thus make the USA government abandon the retaliation against the USSR to defend the European allies if attacked; the second, between the late 70s and the early 80s when, by installing the SS-20, they repeated the attempt, but this time against European cities to induce Europeans to relinquish the USA umbrella.

Soviet penetration, carried out with the help of war materials accompanied by the relative military advisors, has had to face increasing resistance in other parts of the world as well, outside the North Atlantic Treaty area, (the Horn of Africa, Austral Africa, Latin America, South East Asia). The above before the rise of Gorbachev who finally put an end to the invasion of Afghanistan, which had induced NATO, in protest, to interrupt the friendly dialogue and the economic cooperation with the USSR and the countries of the Eastern bloc.

However, the greatest politico-military success is to have made the Kremlin abandon its policy of power "tout court" and negotiate on the reduction of conventional forces with intentions other than those of the unsuccessful previous MBFR negotiation.

This was made possible for the following reasons:

- the Alliance has maintained the initiative in the strategico-political field (Moscow often took the initiative in the tactico-political field) and did not withdraw from its positions nor from the request of an actual balancing of all forces at lower levels, as a guarantee of peace, though it accepted to negotiate and cooperate whenever and wherever necessary for the elimination of tension and the improvement of mutual relations;

- it has maintained a solid and substantial internal cohesion on the vital problems of mutual security, despite the internal crises which, in France for example, led to the withdrawal from the command integrated organization (the same for Greece which later returned) and in particular it has preserved the bond between Western Europe and the United States, whose troops located on the European soil represented the human, political and military pledge of the Washington Government to intervene in our defence in case of a conflict, even if carried out with nuclear weapons.

- despite the evolution in the ratio of forces to the advantage of the USSR in the past years, due to its race for armaments aimed at achieving an overwhelming superiority, the military instrument of the Alliance has been made and maintained to carry out an initial conventional resistance, sufficient at least to avoid sudden ruptures of its advanced defences and by nuclear retaliation bring unacceptable damage in the event that the enemy continued to attack in order to induce him to withdraw and negotiate as provided for by the "flexible response" strategy.

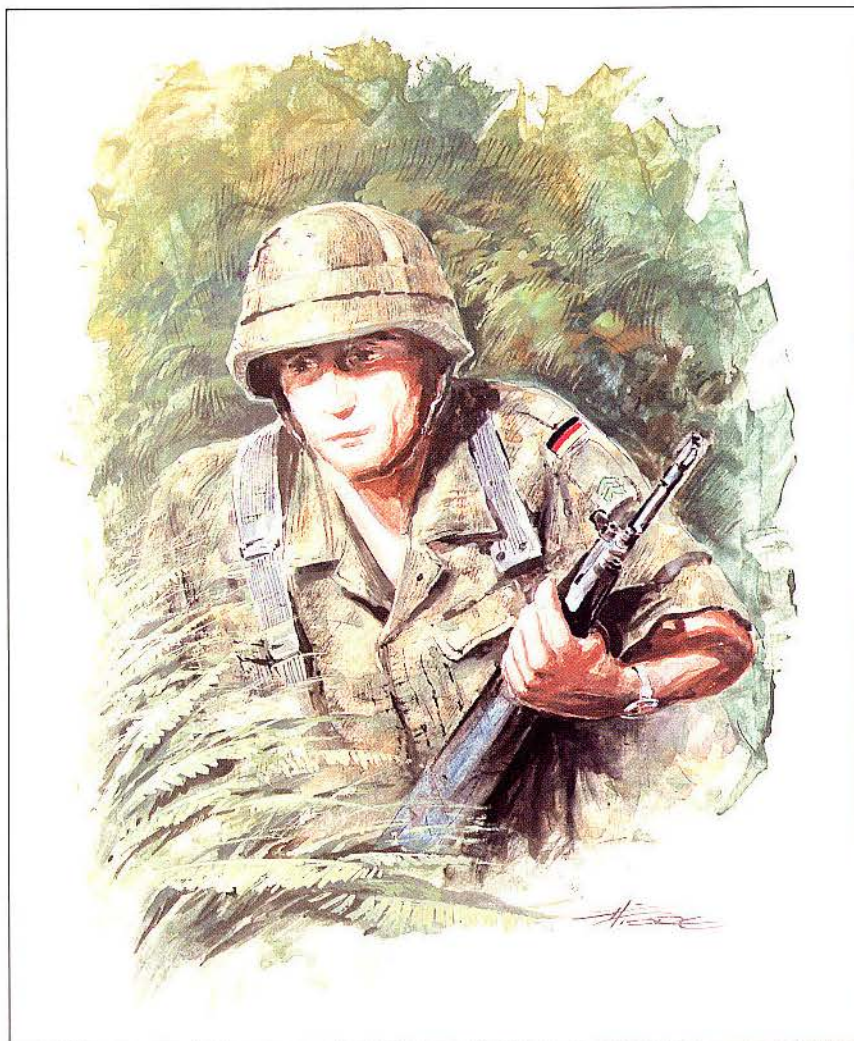
With this strategy and with the above mentioned military instrument the Atlantic Alliance has succeeded in discouraging aggressive intentions and in frustrating the Soviet Union's attempts at intimidation, thus preserving peace on the Continent, the independence of the Western States and the freedom of their citizens.

Italian military men too must be proud of this for our Armed Forces have given an important contribution; determining for the southern area of NATO and an absolutely necessary support for the central area.

THE FUTURE OF RELATIONS BETWEEN EAST AND WEST

It is yet too early to advance reliable conclusions on the new Vienna negotiation on conventional disarmament in Europe which started on March 6, 1989, with the participation of the countries of the two blocs as well as other neutral or non-aligned European countries.

In fact, while we are almost certain that the USSR and the other Warsaw Pact countries are about to start a reorganization which



will reduce their armies by means of the announced cuts in order to face the demographic deficiencies and serious economic difficulties, we have serious doubts as to whether they will be willing to make further important cuts which are actually necessary to eliminate existing disparities, as requested by NATO and as implicitly and partly admitted by the Warsaw Pact itself by recently publishing the comparative data.

- The reason for this is that while the military instrument of the Alliance was conceived to avoid war and stop it at the outbreak - not to win it - it does not seem as if the Soviets have abandoned this aim since they now state that their forces must not go below the levels established by the coalition of the potential enemy, instead of being superior as heretofore and, however, must be capable of counterattacking and destroying the eventual aggressor.

At present we may make three theoretic hypotheses on the future of relations between the two blocs without however, giving indications of differentiated probabilities, though sufficiently plausible:

- the end of Gorbachev's detente as already happened with Krushchev and Breznev with a return to the cold war and a new accelerated race for armaments. This will happen if the internal centrifugal process, favoured by "glasnost" and "perestroika" thrusts the Moscow empire into a severe crisis and makes it search for a cohesion to give new shape to the external threat of world capitalism;

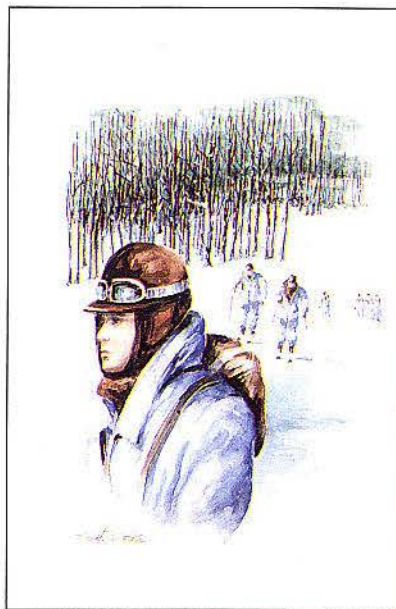
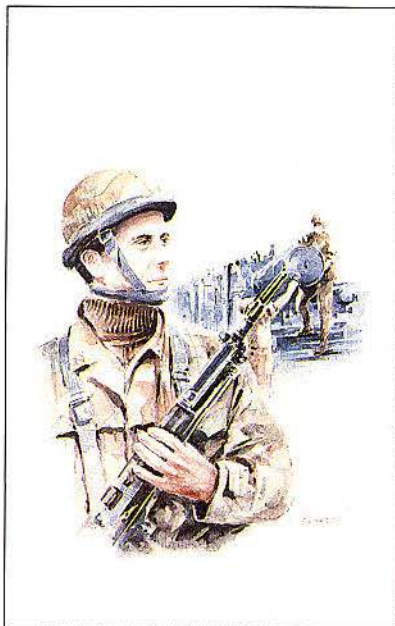
- a "slackened" pursuit of detente, especially as regards conventional disarmament, in case the Soviet leadership is unwilling to abandon the attained superiority, either for security reasons or because such disarmament is no longer necessary to weaken both materially and morally the Atlantic Alliance, in case its defensive power and cohesion were already compromised for internal motivations;

- a quick and gradual development of detente and disarmament in all fields due to Gorbachev's political will aiming at recovering Soviet economy and, in the long run, achieving the separation between Western Europe and the United States.

Moreover, whatever the winning hypothesis, the following must be borne in mind: even if Russia abandoned the aim of its past military policy to overwhelm NATO forces in Europe, it cannot relinquish its political and geostrategic objective to disrupt the Atlantic Alliance and impose its will on Western Europe.

In view of this unchanged objective the Soviet leadership will try, despite negotiations on disarmament, to undermine the strength of the Alliance: the politico-military bond with the United States and the nuclear armament, essential instrument for dissuasion.

Gorbachev's pacifist offensive aimed at convincing Western public opinion that the threat from the East has disappeared, must be placed within the above framework. it



would thus be no longer necessary to carry on the "force programmes" of the Atlantic Alliance as regards nuclear or conventional forces, even though established only with the aim of limiting the existing gap between the military power of the two blocs.

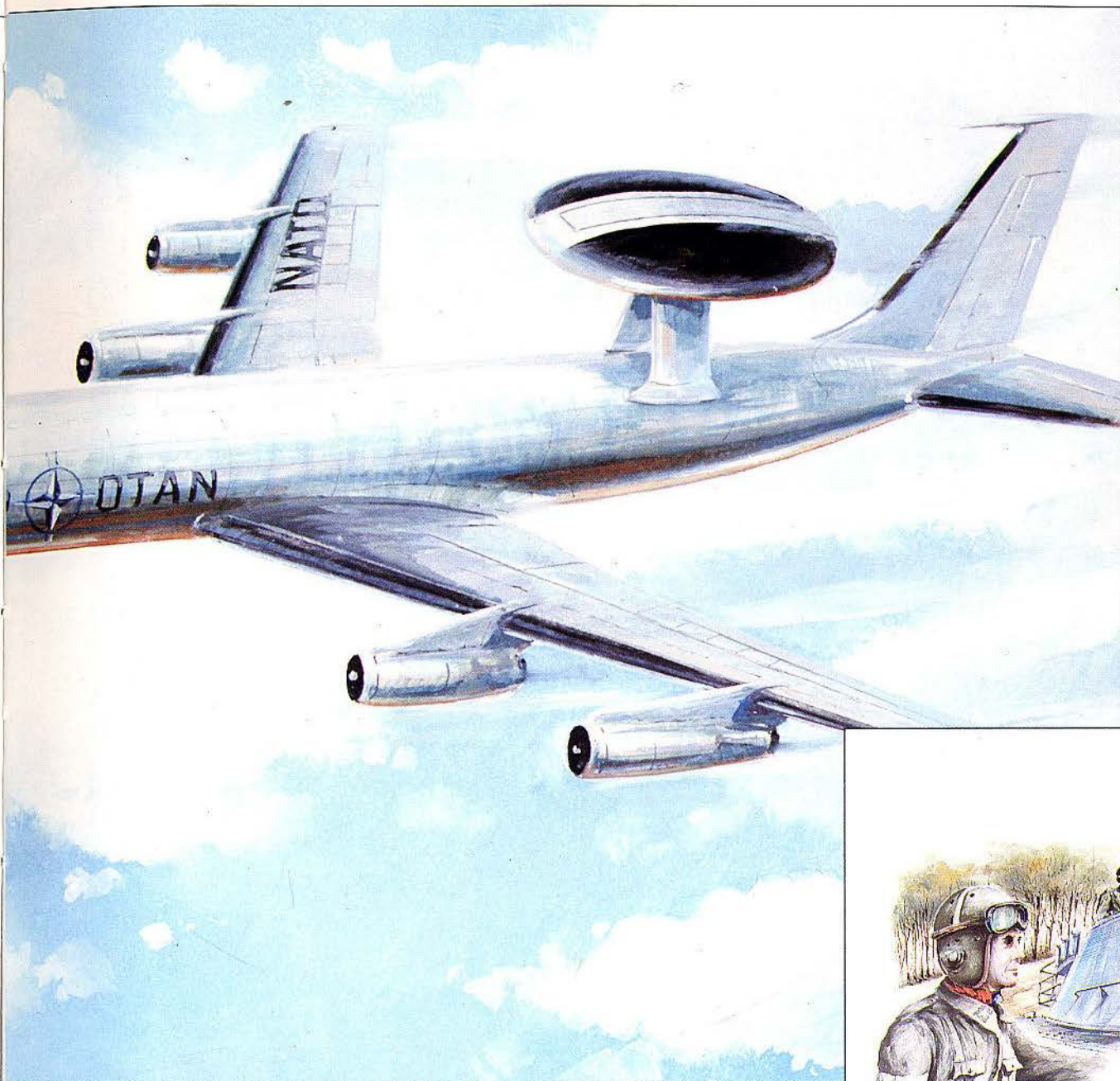
The international political situation in relations between East and West has reached a point in which one can only go ahead or backwards and I believe that, if Gorbachev remains in power, we shall have to go ahead due to the USSR's present state of need. According to me the step will probably be "slowly ahead", at least for the next five or ten years. This because - during the dialogue between the parts and as a result of

this dialogue - the reasons for distrust and disagreement will dwindle and those for mutual trust will consolidate though the elimination of disparities between the two forces and the actual ponderal balance at lower levels wanted by NATO and Western public opinion will not be attained.

However, the likelihood of a surprise attack will be greatly re-sized, though the USSR will maintain its capacity to develop a large scale offensive by mobilization.

CONCLUSIONS

From what outlined above as regards the



future of East-West relations we may undoubtedly state that the Atlantic Alliance is in a crucial stage of transition in which, as a result of the successes achieved, the very reasons for its existence seem to fall through so that peoples and governments instinctively lower the guard, while the risks are actually still there and could suddenly spring up dramatically.

Therefore, at present the greatest difficulties for the Alliance consist in "managing" the copious and promising results of the past, without losing security, indeed increasing it, since the latter allows to employ in the best possible way the moral, intellectual and material energies of Western democracy in or-

der to attain economic power, welfare, freedom and peace.

In the competitive confrontation with the East which will continue throughout negotiations on disarmament and after, it will not be enough to reduce the main elements of the enemy military power which threaten us, but we shall have to safeguard the determining factors of our political and military "strength", that is solidarity between Western Europe and the United States and the availability of nuclear weapons for dissuasion.

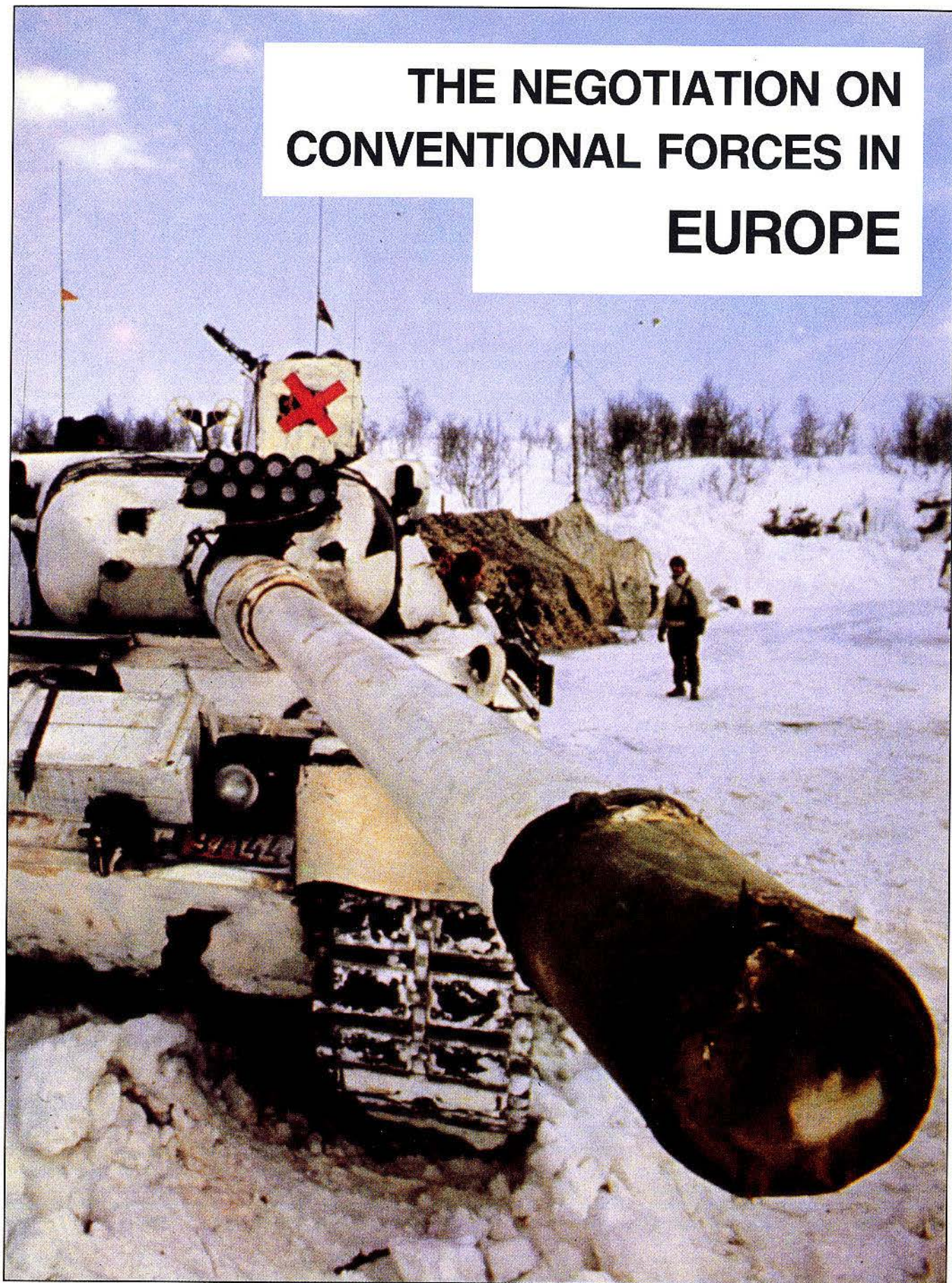
If negotiations on disarmament succeed, we shall be able to change the "military strategy" of the Alliance, as already occurred

in the past, and adapt it to the new situation of ratio of forces; the above factors, however, will have to be the basic elements.

Gen. Vittorio Bernard

(1) It is, however, a failure having a historic bearing: ideologic, socio-political and economic which made the USSR put off history examinations because, after the acknowledged untruths of the past, they do not know what texts to use and maybe they do not know what to write in the new texts.

THE NEGOTIATION ON CONVENTIONAL FORCES IN EUROPE



On March 9 NATO and the Warsaw Pact gave rise in Vienna to the *Negotiation on Conventional Forces in Europe* (CFE) which aims at lowering the level of the military confrontation on the European continent by acting on the conventional forces of the blocs stationed there.

The new Negotiation sanctions the actual failure of the previous one on *Mutual and Balanced Force Reductions* (MBFR) which for 15 years unsuccessfully pursued the same objective in the area of Central Europe with the participation of a more limited number of countries of the two sides.

In the following pages the main problems and outlook of the new Negotiation are examined on the basis of what may be perceived from the initial stages.

THE «MANDATE»

The Negotiation on Conventional Armed Forces in Europe is carried out on the basis of a mandate agreed upon among participants during the preparatory stage. This mandate indicates the objectives of the Negotiations, the methods to reach them, the forces concerned and the area of application of future agreements.

Objectives are the following:

- to strengthen stability and security in Europe;
- to eliminate disparities which may jeopardize stability and security;
- to give priority to the elimination of the capacity of attacking by surprise and carrying out large scale offensive actions.

These objectives must be achieved by means of the following:

- the establishment, at levels lower than the present ones, of a firm and safe balance of conventional Armed Forces;
- the application of militarily important measures such as reductions, limitations, redeployment, equal ceilings and co-related provisions;
- the gradual introduction of agreements in order that the security of each participant be guaranteed at all stages;
- the severe and efficacious use of verifications.

The area of application of the above negotiation includes the European territory which lies between the Atlantic Ocean and the Ural Mountains, including the European insular territories of the participants.

The forces concerned are those based in the above mentioned area belonging to participants. Thus the forces of the two blocs located outside the area as well as the nuclear, naval and chemical forces wherever located are excluded.

The mandate is the result of almost two years' negotiations among the parts and is a compromise among often very distant positions. Compared to the mandate for the MBFR negotiation it seems remarkably more binding; in fact the general aim of the MBFR negotiation was to contribute to more stable relations and to the strengthening of peace and security in Europe. As for the methods, it was decided that the agreements

to be reached were to conform to the principle of a non-diminished security of the parts.

The new negotiation thus seems to stem from more solid grounds and this, together with the fact that it involves directly all the countries of the two Alliances, seems to give it more chances of success.

It must be mentioned, however, that certain Western participants are not "easy" and have particular demands. Moreover, in the MBFR, NATO delegates negotiated as an Alliance coordinated by the Atlantic Council; in the new negotiation each Nation maintains its individuality and even if we can perceive that NATO is carrying out some form of coordination, the unity of opinions shown by the West during the MBFR could sometimes be in danger.

As regards the Warsaw Pact, the Soviet leadership which had always been clear within the MBFR negotiations will probably be affected by the openings under way in the Eastern world and we cannot exclude the rise of national positions apt to break the previous monolithism.

Apart from the above, however, the new Negotiation has had to face a series of problems which, according to the MBFR ex-

perience, could block it right from the start or hinder its path sine die.

AREA OF APPLICATION

The area of application of the negotiation is formed by the European territory fixed to the West by the Atlantic Ocean and to the East by the Ural Mountains, by the Ural river and by the Caspian Sea; the land of Franz Joseph, the New Zemblja and the European islands are also included. The Asian territory of Turkey is only partially included; the boundary area of Iran, Iraq and Syria have been enucleated from the area of application because this area, though unimportant for the military balances in Europe is, however, important for the security of Turkey as regards to those States which will not participate to future agreements (1).

One of the crucial subjects discussed during the MBFR negotiation somehow also applies to the new negotiation and that is the one known as the geographical factor. In the MBFR American and Canadian forces with-

German counterair self-propelled tank «Gepard».





USA artillery men getting ready to load their M102 105mm light howitzer.

drawn from Central Europe had to return beyond the Atlantic, British forces beyond the Atlantic, British forces beyond the Channel, Soviet Forces to the East of the Czechoslovakian-Polish boundary; according to the new negotiation American and Canadian forces should retreat as above, Soviet forces beyond the Urals.

For the Europeans the situation has certainly improved. The improvement, however, does not concern the substance as the main military potential of the Warsaw Pact is still on the Euro-Asian continent and the chances of it being re-introduced are much greater than those of getting North-American reinforcements.

For the Western World the improvement regards the possibility for the East to carry out consistent large scale surprise and offensive actions: such operations, in fact, require a previous flow towards the West of second and third echelons from the rear regions of the Soviet Union and this could not be unobserved and would demand much more time than the one allowed by the old MBFR area in Central Europe.

INITIAL AND FINAL DATA ON THE FORCE

The problem on data regarding forces present in the area of the Negotiations has for years tormented the life of MBFR: the Soviets have never accepted NATO estimates for Central Europe (190,000 men more for the Warsaw Pact) holding that in this area there is a rough equality of forces

FORCES FROM THE ATLANTIC TO THE URALS (Rough figures)

	NATO ESTIMATES (1)		WARSAW PACT ESTIMATES	
	NATO	WARSAW PACT	NATO	WARSAW PACT
Ground Forces	2,214,000	3,090,000	2,115,000	1,823,000
Tanks	16,500	51,500	30,500	59,500
Armoured vehicles	39,500	93,500	47,000	70,000
Artillery	14,500	43,500	57,000	71,500

(1) Only materials distributed to the units are reckoned. If we consider materials in stores figures increase for NATO by 5,800 tanks, 8,135 armoured vehicles and 2,870 pieces of artillery; the stocks of the Warsaw Pact are not well known, but are estimated much higher.

of the two blocs. To overcome this deadlock, Western negotiators put the issue aside and decided to repropose it at another time, but this has not as yet happened and the problem is still unsolved.

A similar problem came up in the new Forum. Many new countries and further consistent forces have entered into negotiations: Spain, Portugal, France, Denmark, Norway, Italy, Greece and Turkey for NATO; Hungary, Bulgaria, Rumania for the Warsaw Pact. According to NATO estimates, Western forces to be reckoned have increased by about 1,500,000 men; Eastern Nations and the metropolitan territory of the Soviet Union have added 2,200,000. On the whole, the West which was already inferior in the MBFR area, is at a further disadvantage in the territory from the Atlantic to the Urals and the difference with the Warsaw Pact is about 900,000 men. The same is as

regards armaments.

The unilateral withdrawal of 50,000 men from the German Democratic Republic, Czechoslovakia and Hungary (6 armoured divisions and 5,000 tanks) started a few months ago, represents a decrease of about 20% of the Superior Soviet Units in Central Europe but does not make up for the existing differences. Neither will the reduction foreseen within the next two years, of 500,000 men (240,000 in Europe and the rest in Asia), 10,000 tanks and 8,500 pieces of artillery announced by Gorbachev in December 1988.

These reductions, in fact, do not affect the strategical potential of the Warsaw Pact and do not jeopardize the Soviet Union's capacity of carrying out large scale offensive actions.

At the end of last January, the German Democratic Republic decided to reduce its

Armed Forces by 10,000 men and 600 tanks within two years; Hungary, Czechoslovakia and Poland will do the same and the withdrawal of some Soviet units located on Polish territory cannot be excluded. This is a re-sizing of the Warsaw Pact forces which appears aimed at transforming, in a reductive sense, the image of power of the Eastern bloc before the new Negotiation starts dealing with numerical data.

This indirectly confirms the fact that Western estimates are not very far from the truth; for Nato therefore the gap regarding forces located on the European continent is in favour of the Warsaw Pact which will continue to be superior to the West even after the announced withdrawals. This means that in order to reach an equality of forces the reductions to be considered by the new Negotiation cannot be equal.

How can we quantify the present basic differences?

This is no simple answer: the MBFR negotiation has come to a deadlock to define the system of control of the initial data. The first step should be the exchange of information on the existing forces and the opportunities of verifying them in order to achieve acceptable results.

Comrade Gorbachev officially declared himself ready to do this; thus this is not the problem as the willing to exchange information also during the MBFR negotiation; the real obstacle is the subsequent step as the proof of the accuracy of data requires the willingness to supply them demultiplied to the level of unit which may be controlled without a margin of error and also requires the unconditioned acceptance of on-site verifications. It is not at all certain whether the eastern side is now ready for an opening which it has always refused in the previous negotiation.

Moreover, what data would be exchanged and verified? That of all the components of the military instrument or only the more important ones, that is that of the potentially more dangerous components? According to the West tanks, transport armoured vehicles and artillery are considered dangerous. The counter-part, however, does not agree with this and has vented the problem of other kinds of armaments and materials and particularly that of the air and naval forces.

However, granted that an agreement is reached on the kind of data to be exchanged and that the exchange takes place, the following stage would be, as already mentioned, the verification of the figures supplied by the parties concerned as each Alliance will surely have its own estimates on the enemy forces which will not coincide with the data submitted. This too is no small problem.

For instance, let us consider having to verify 1,500 tanks and having to do this so that the result be indisputable.

The operation would require the almost contemporary presence of inspectors in scores of barracks located between Udine and Capo Teulada, inspections in the training areas, in plants, depots and factories. The order of battle of armoured units should virtually be made known in all its particulars and the entire national territory should be opened to verifications.

If we consider bigger countries such as the Soviet Union for example, verifications would require an unacceptable length of time and operations of verification would be almost unproposable as they would concern figures amounting to millions as regards personnel and thousands as regards materials. And what if at the end figures turn out to be wrong? This is possible because we know that NATO estimates published in December 1988 did not coincide with those of the Warsaw Pact published in January 1989. The gap may be due to different methods of reckoning, but an agreement on these methods may also be an obstacle which cannot be overcome.

As things now stand, some people believe that basic differences could be ignored and more attention should be paid to the final data: in other words, we should aim only at controlling the forces that each bloc must

have at the end of the reduction process and, as regards the initial data, carry out a few sample verifications on values supplied by the counterpart. In his closing speech at the CSCE Soviet Foreign Minister, Shevardnadze, recommended not to lose time with the basic data and long debates on the methods and classes of arms, since the aim of the Negotiation is the final level and not the initial one. "Arithmetic — he added — should not become an obstacle to politics".

This idea has supporters also in the West as these believe that this would avoid a deadlock such as the one which arose during the MBFR.

In fact, the idea of starting reductions "in the dark" is rather puzzling. Some people point out that the control of the final data may give rise to the same difficulties as that regarding the initial data and the risk could be that of starting reductions without being sure of being able to check results. Supporters of the procedure "without data". However, sustain that by that time the forces to be controlled will be greatly inferior and, what is more, the after-agreement system of verification would be applied which, as we shall explain later, the West wants very binding.

Which data are Right?

Figures of the previous table are drawn from the publication "Classical Forces in Europe facts", published by NATO in December, 1988 and from estimates of the Warsaw Pact of January 1989. These figures do not coincide with those of other sources, especially with those of the London International Institute for Strategic Studies which has always been considered an authority on the subject. In the 1988 Military Balance the Institute gives the following figures for the active ground forces located between the Atlantic and the Urals.

	NATO	WARSAW PACT
Personnel	2,340,000	2,143,000
Tanks	22,200	53,000
Armoured vehicles (calibre 20mm)	6,200	23,600
Artillery	10,600	36,000



USA combat tank M1A1 «Abram» armed with 120 mm smoothbore gun.

EQUAL REDUCTIONS, ASYMMETRICAL PERCENTAGES

As regards the old MBFR negotiation the new area of reduction of the forces is vaster and better defined; here too it is a question of finding solutions which will guarantee that during the entire process of withdrawals and that at its conclusion the security of the parts be assured or at least not compromised, that is the possibility of defending oneself and the impossibility of attacking with high chances of success.

To obtain this result the MBFR negotiation provided that the total ceiling of the forces of each bloc be of 900,000 men and this was to be obtained through a series of balanced reductions of present forces. In the Budapest Appeal of June 1986, Gorbachev proposed a reduction of about 25% of the forces of the two parts. This proposal seems to stem from the implicit idea that the military balance in Europe already exists and puts forth solutions of a linear and symmetric kind which do not at all take into account the present inequalities and the limitations inevitably imposed by the geographic situation of the two blocs.

In sum, give an example, the impact of a 25% reduction of the Western German

forces cannot be compared to the same reduction of Rumanian forces. In the same way a 25% reduction of the tanks of the two blocs assigned to the operational units would take NATO from the present 16,424 to 12,318 and the Warsaw Pact from 51,500 to 38,625 (Western estimates); the gap would pass from 35,076 to 26,307 tanks: this decrease attenuates the imbalance, but does not cancel it.

Such an approach to the problem is thus not in line with the aims of the West whose primary objective is not the mere reduction of the forces of the two blocs, but the achievement of a balance centred on the elimination of the existing inequality. Symmetrical and linear reductions, the same or of the same percentages — such as those proposed by the Soviets in Budapest and stated during the Moscow meeting between Reagan and Gorbachev in May 1988 — put the West at a disadvantage and do not favour stability.

The coming negotiation, therefore, will have to continue to insist on the fact that — mentioned without success during the MBFR negotiation — the geographical factor and the conventional superiority of the Warsaw Pact imply that the balance may be achieved only by means of asymmetrical reductions. In principle this has also been acknowledged by the Soviets, but in Vienna, during negotiations, they declare that asymmetries are not only against the West: data supplied by the Warsaw Pact on the main classes of arms of the two blocs give, true enough, an Eastern superiority as regards tanks, artillery and armoured vehicles, but not as regards antitanks, aircraft

and helicopters. Generally speaking there are other asymmetries in military potentials according to which the West has a greater capacity as regards human resources, technology and industrial productivity.

The new area of reduction from the Atlantic to the Urals includes the part of the USSR with the greatest concentration of fighting units; together with these, however, there is a great number of training units, logistic bases, depots, schools, support units of all kinds. These structures also have armoured vehicles, cannons and various armaments, but as they are not fighting units they may not be included in an agreement centred on forces capable of attacking; moreover, this also holds true for the USA.

However, it is easily understood that in case of an emergency all the above may quickly be turned into fighting units and thus be added to peacetime operational units. Many Western European Nations have plans to this effect and so do the United States and Canada, but, as usual, in terms of danger, having logistic bases and training units on the Soviet territory is something quite different from having them on the American continent.

This, therefore, should be another of the asymmetries to be considered and the coming negotiation will have to find solutions not only as regards advanced and ready employment forces and the relative materials, but also as regards remaining forces.

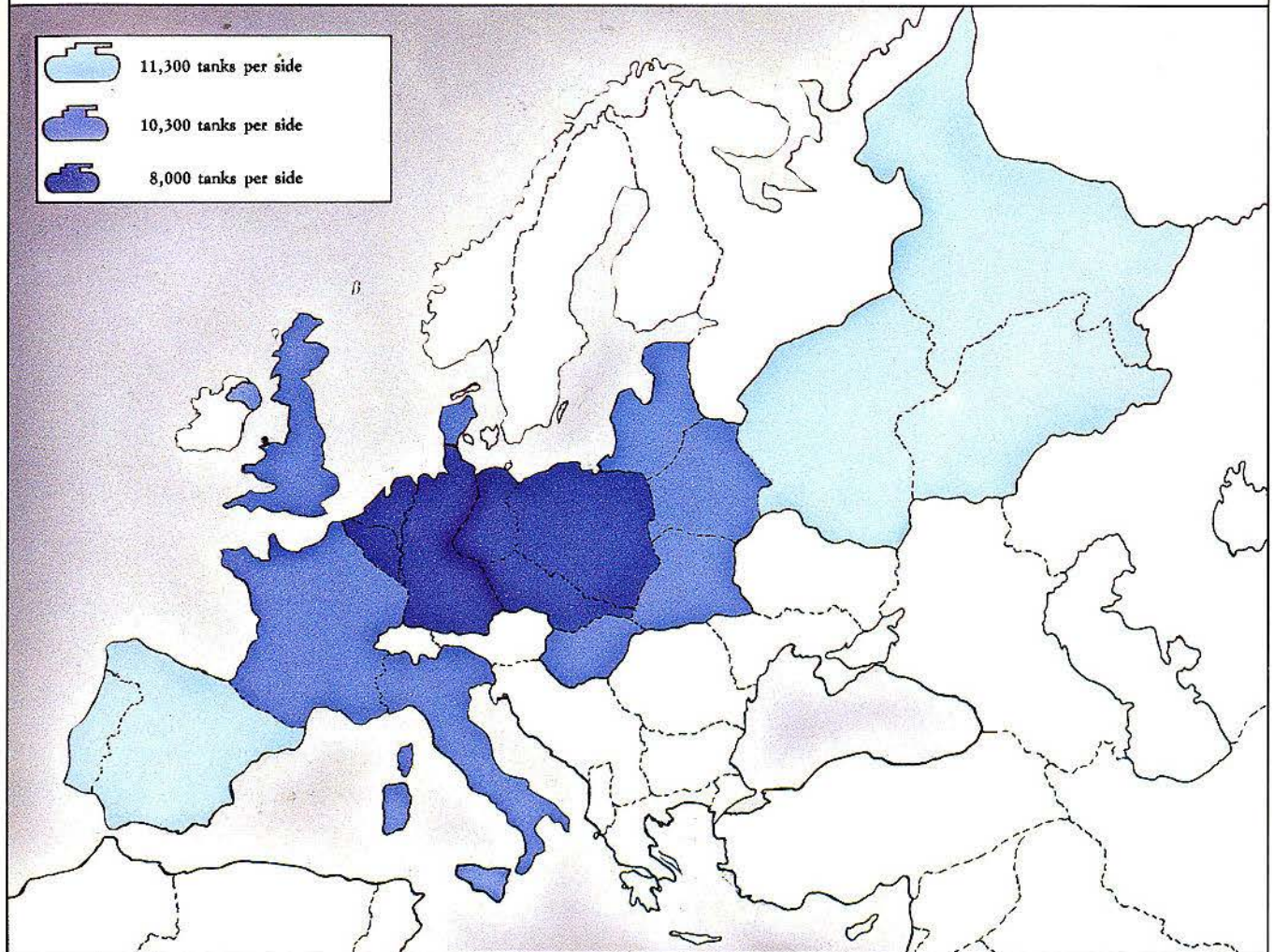
COLLECTIVE CEILING, INDIVIDUAL CEILING

Once the global level to which forces in Europe must be reduced and maintained has

Soviet paratroopers getting ready to embark on a Iliushin Il 76 transport aircraft



CONCENTRATION OF TANKS (Western proposals)



been established, we must decide whether this is on a collective basis, that is for the whole of the Nations, or whether individual sub-ceilings must be set for each Nation. In the first case we could theoretically reach the ceiling with forces of a single Nation, for example solely with American and Soviet forces eliminating those of all the other allies.

In the second case, the two Alliances could make up for the reductions of a country by increasing the forces of another, but only up to the individual ceiling allowed for each Nation.

During the MBFR negotiations, the Soviets were in favour of an individual ceiling and the reason considered at the basis of this position is that the individual ceiling permits to maintain a precise limit to the forces of Federal Germany, rightly or wrongly considered by the Warsaw Pact as the most dangerous among Western forces. We may thus believe that this attitude will be followed by the East also during the coming negotiation.

The individual ceiling is clearly to the disadvantage of NATO as it does not allow any

flexibility. Western countries are totally self-sufficient and the Atlantic Alliance does not have the monolithic structure that characterizes the Eastern bloc. Thus, if a Western country autonomously decides to vary the consistency of its Armed Forces in peacetime or, as already happened in France, to exit from the military structure of the Alliance, the other countries must be able to balance this situation by making the appropriate variations to their forces.

The problem is greatly felt by Western Germans as well as by the Turks who believe themselves to be more directly subject to the threat and thus aim at maintaining the right to increment their defences if for some reason their allies should reexamine the consistency of forces put at the disposal of NATO.

However, the need to avoid individual ceilings does not agree with the need to limit the presence of Soviet forces in Europe which, at present, form about 2/3 of the Warsaw Pact forces and most certainly the most battle trained part. Thus, for its security the West must put limitations to the lo-

cation of Soviet units West of the Urals so that these do not exceed the American ones. This way too the agreement would not be in favour of NATO as regards the problem of withdrawn Soviet units which still remain close to the Urals.

Here, however, we shall have to face another important problem: if we truly aim at a kind of equality between American and Soviet forces in Europe we shall have to solve the equation of balancing 216,000 Americans and their 1,800 tanks, 6,550 armoured vehicles and 11,000 guns and 2,200,000 Soviets, 37,000 tanks, 64,000 armoured vehicles and 33,000 guns. If we exclude an increase in American forces, the simplest solution could be (and will probably have to be) that of an updated edition of the area of MBFR reduction, elated to the central part of Europe, in which the Soviet presence were greatly reduced; in Europe as a whole, from the Atlantic to the Urals, we should establish a NATO - Warsaw Pact balance.

This is a decisive item of the new Negotiation as the danger for stability is not, or not



A marine engaged in aiming with an antitank TOW missile system.

only, in the degree of strength, but in the huge superiority of the Soviet Union as regards all the other European states and in the advanced location of this superiority. It is here that the new Negotiation will have to guarantee radical changes, taking advantage of the favourable times which see, on the one side, Gorbachev engaged on the domestic front to reduce military commitments in his country and, on the other, several countries of the communist area intent on decreasing the Soviet presence on their territories.

REDUCTIONS AS REGARDS MEN, REDUCTIONS AS REGARDS MATERIALS

When speaking of degrees of strength, the problem of armaments arises. There is, obviously, a certain relationship between men and materials: during the MBFR negotiation Westerners privileged men on the basis of the principle that they employ means and materials; the negotiation on medium range nuclear weapons (INF) was centred on materials as the destructive capacity of the latter made the men that employed them almost negligible.

According to Westerners the new Negotiation must privilege armaments for several reasons: means and materials may be counted — and, what is more, they may be controlled more easily than men — the offensive capacity of a modern army is based essentially on means and, lastly, they create less negotiable problems because they avoid tricky issues such as which men to count (military forces, para-military forces, in training, fighting, support, ground, air units, naval infantry, etc.) which have for many years blocked the MBFR negotiation.

However, reference to means and equipments represents an undeniable danger for NATO: their withdrawal from the area of reductions highly affects quick mobility capacity and the possibility of reinforcing the West, but does not greatly affect the capacity of the East which will benefit from ground communication paths.

To balance this disadvantage, NATO has the advantage that the Warsaw Pact has a ratio tanks/men and artillery/men superior to that of NATO and thus it is better for the West to balance tanks and guns as well as soldiers. However, when speaking of materials the problem becomes more complicated because there is a need to define materials which will be the object of negotiations: as already mentioned, tanks, artillery and armoured vehicles should undoubtedly be dealt with, but we shall have to agree on how to

compare them because they do not have the same characteristics. Moreover, it seems that the Soviet Union has no intention of stopping at this and also wants to include arm systems in which, it states, NATO is superior in number; besides, it has no intention of omitting its personnel.

SYSTEMS WITH A NUCLEAR CAPACITY

However, the reduction of materials means entering the field of double and triple capacity weapons. Missiles, artilleries, aircraft, mines and probably certain kinds of tanks have a metaconventional capacity. NATO is set on reducing artilleries and thus guns having a nuclear capacity would not be excluded, but for the other systems the problem is more complicated.

As regards tactical missiles, it is possible that their reduction/elimination will be considered, at least as far as the Eastern part is concerned. In this respect, however, opinions differ greatly within NATO. Some consider them unacceptable for they will inevitably strike the "friendly" territory, others consider them absolutely necessary as they are the only ground missiles in the West capable of carrying out the flexible response strategy, the only one that can make the risks of an attack, though only conventional, incalculable in advance.

Hal way between these two thesis we have those who believe in the opportunity of a negotiation dealing with "medium range" missiles, but only once a balance will have been established and stability in the conventional field guaranteed. In fact, under such circumstances deterrence would be implied in the facts as no attack could have much chance of success.

The debate on tactical missiles, however, comes after the drafting of the preparatory agreements of the new conference. In the mandate drafted in February the problem of double capacity was solved by the agreement that no conventional armament or equipment will be excluded from the negotiation for the fact that it may have other capacities besides the conventional ones.

By this agreement, reached after difficult mediations, the idea of the so-called constructive ambiguity was adopted.

This does not exclude or include any multiple capacity system and thus leaves the problem open to negotiations.

However, as tactical missiles are nuclear systems having a conventional capacity, despite the altitude of some Eastern Representatives, the thesis that such systems are excluded from the CEE Negotiation seems to prevail in Vienna and thus they will not be dealt with here. However, despite this tacit agreement, the Easterners have no intention of yielding as regards the third double capacity system: the aircraft.

AIR FORCES

To say the truth, Westerners showed no ambiguity as regards air forces. Even if in an extensive interpretation of the mandate the term "ground based conventional

forces" are not embarked, the West clearly let us understand that it does not consider air forces the prioritarian subject of the Negotiation. In fact, in the present situation of great conventional and nuclear imbalance between NATO and the Warsaw Pact in Europe the air component is an essential element for the defensive strategy of the Atlantic Alliance.

In their conventional form fighter bombers are at present the sole Western weapon capable of beating concentration of forces trained for surprise attacks. In their nuclear form they are, even more than tactical missiles, a basic element of deterrence as they are the only long range aircraft belonging to the West after the elimination of Pershing and Cruise following the INF negotiation.

Moreover, as the Negotiation is centred on large scale offensive operations the air component is not part of this priority as it is insufficient to invade and maintain the territory. Besides, because of their mobility — from the Atlantic to the Urals — they are not easily counted: their reduction means redeploying them beyond the Urals as regards the East and beyond the Atlantic as regards the West and this would be to the disadvantage of the West because of the greater distance.

It must also be borne in mind that the Soviets have no intention of negotiating on all the aircraft but only on those considered as capable of "attacking tactical aviation"; this definition should indicate the aircraft suited to carry out ground attack missions and for this very reason, capable of carrying out offensive operations against ground forces and thus an integrating part of the destabilizing potentials that the CFE negotiation intends to limit.

The above, however, would include almost all Western aircraft — which in general have a multiple role — against a small number of aircraft belonging to the

Warsaw Pact; this because a great number of Eastern aircraft is allotted to counterair defence organizations, that is to counterair tasks which, for the Easterners, is part of the defensive potential and not of the attack potential.

It is obvious that the East must reexamine this unnatural definition of the aircraft because the existing possibility of reconverting aircraft easily makes their role interchangeable.

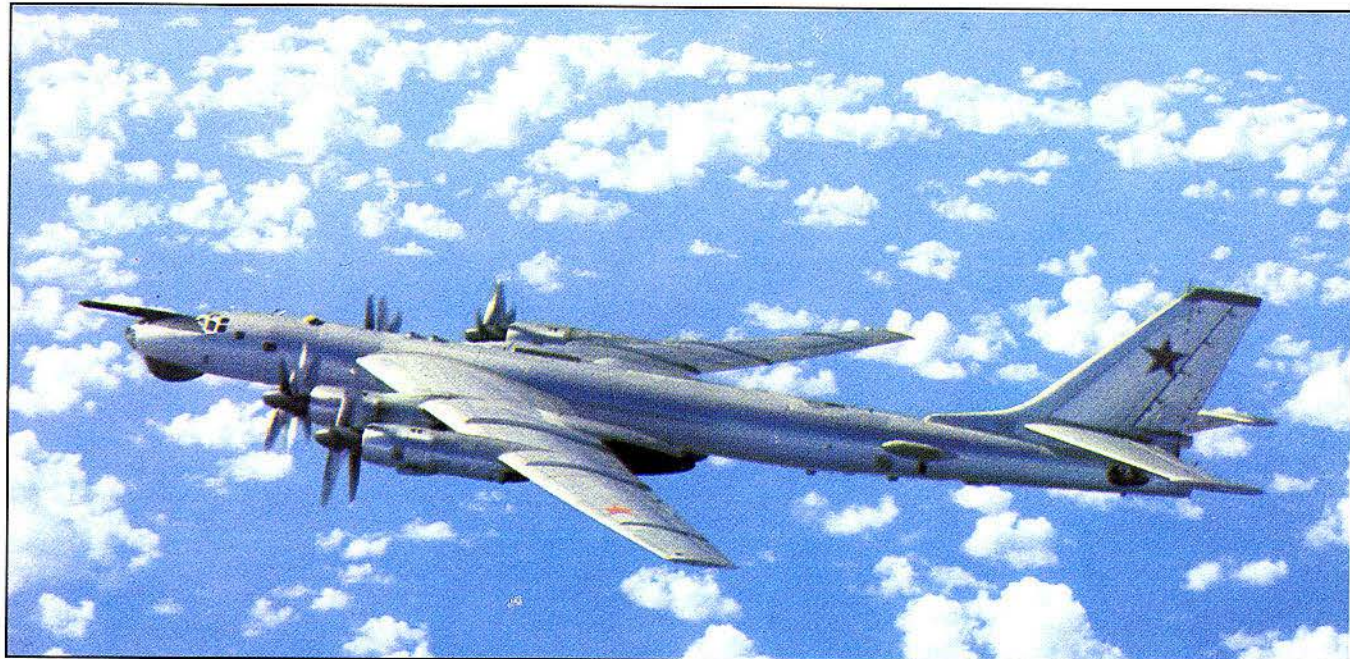
If an agreement is reached on this issue and there is a favourable trend of the Negotiation as regards other systems at issue, the West is ready to negotiate on this component as well and though it will not accept a dangerous drastic reduction it will certainly consider a rebalance to levels inferior to the present ones. This, of course, would only regard "groundbased" aircraft.

NATO'S POSITION IN THE NEW NEGOTIATION

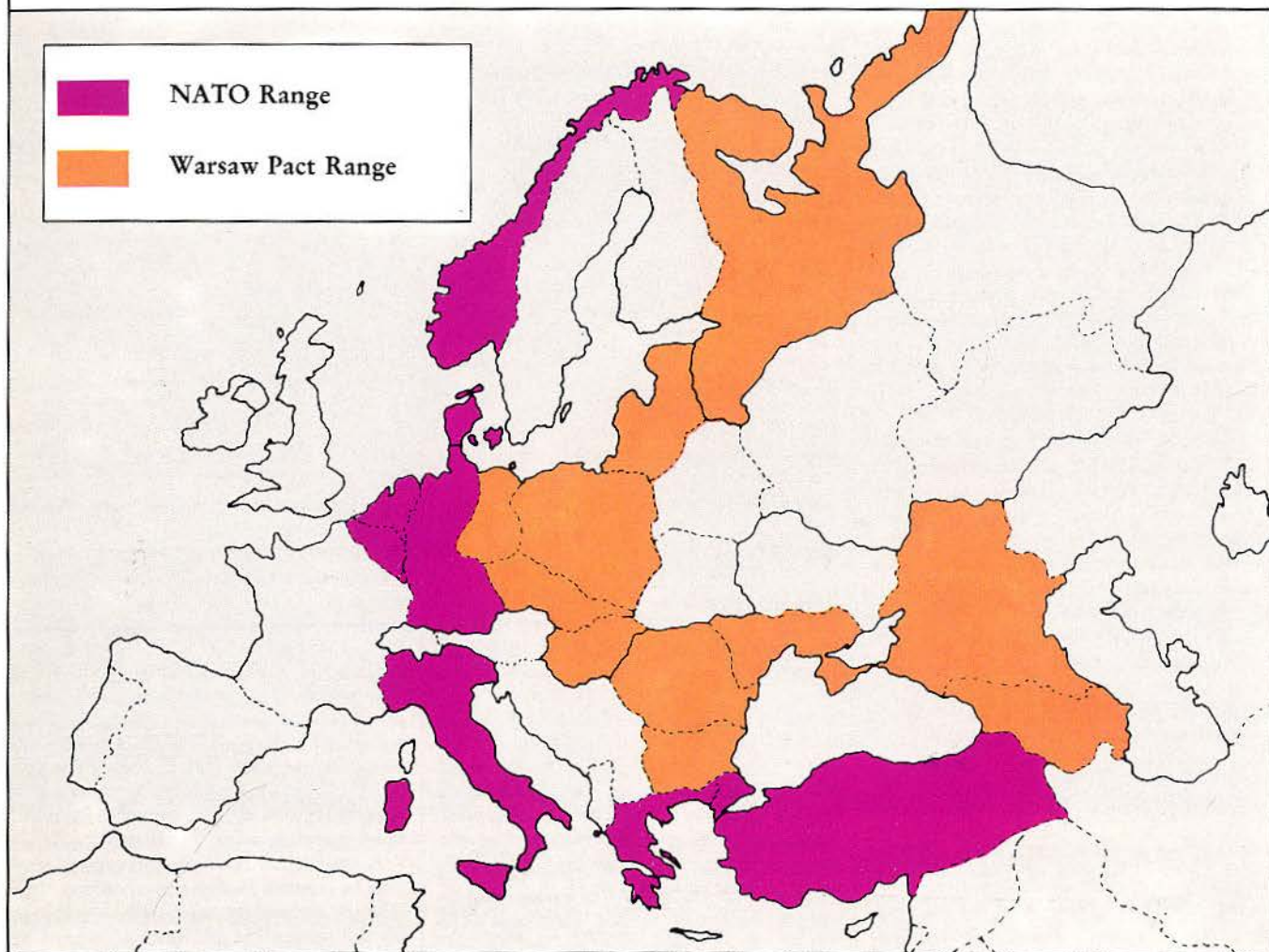
The declared aim of the Negotiation — it is necessary to repeat it to better focalize the above — is to eliminate the more destabilizing imbalances and radically reduce the chances of surprise attacks and large scale offensive operations. For the West this means carrying out balanced reductions — and thus asymmetrical given the present disparity of forces — designed to lead to lower equal levels as regards ground weapons of an offensive type and, that is, as regards those arms systems which due to their firing power, mobility and protection have attacking and invading capacities.

According to Nato the agreement must thus be centred on those components of the military instrument which are determining for the occupation and maintenance of the territory. Such components have been individuated in tanks, armoured vehicles, ar-

Tupolev Soviet bomber - Tu 142 «Bear».



EASTERN PROPOSALS - RANGES OF CONTACT



tilleries and the forces employing them, especially those deployed on advanced positions.

As the Warsaw Pact, and markedly the Soviet Union, is at present far superior as regards the above materials, reductions must aim at eliminating this superiority heavily affecting the present Eastern military supplies, especially those of the Soviet forces.

Let us make a practical example, that of the tanks.

NATO asks for the global limit of these means in Europe to be set at 40,000 units which include tanks allotted to operational units and those presently designed for any other use (at present there are 68,000 tanks in the operational units, 51,500 of the Warsaw Pact and 16,500 belonging to the Atlantic Alliance).

None of the 23 countries taking part in the Negotiation must be in a condition to threaten the others with large scale offensive operations and thus no Nation may have more than 30% of the total, that is more than 12,000 tanks (USSR has 37,000 at present and is the only Nation to exceed this

limit; within NATO the FRG has the greatest number of tanks, but this figure is well below the limit as it amounts to 4,300 tanks).

To prevent a rear country to deploy its tanks in an advanced position — which would thus represent a threat — the means of each Alliance located outside the national boundaries in active units must not exceed 3,200 units (at present Western tanks located in countries different from the ones they belong to are about 3,500 while Eastern tanks — which are virtually only Soviet — are more than 11,000).

However, despite such limits, both NATO and the Warsaw Pact could locate a high number of tanks towards the Line of contact in Central Europe and this would still make surprise attacks and offensive operations possible. The West thus demands that:

- of the 20,000 tanks allowed to each Alliance, only a certain percentage be kept in the employment departments;
- from the Atlantic-Ural area be enucleated three sub-zones with a decreasing concentration of tanks where the means dis-

tributed to the active units of each side do not exceed certain set values.

The solution outlined as regards tanks, clearly indicates the kind of approach the West intends to follow during the new Negotiation; as regards other arms systems percentages are different, but the basic philosophy remains the same.

It is obvious that as regards tanks, and other materials, reductions would not greatly affect the forces of NATO countries but would be very important as regards the Soviet Union.

However, the elimination of asymmetries is the first aim of the Negotiation and, inevitably, is the price to be paid to reach a really convincing stability.

Indeed, due to the fact that stability is not only a reduction of forces to same level, but also the guarantee that the level is not exceeded and that the residual forces are not a threat, the West demands a series of additional commitments and so-called measures of stabilization aiming at reducing the capacity of a rapid reinforcement and concentration of the units and increasing the

Soviet Navy riflemen disembarking from BRDM2 armoured vehicles.

chances of foreseeing eventual threats.

In particular, given that the parts concerned must inform yearly on the number of tanks supplied to the units upto battalion level and notify changes to such values, the following must be agreed upon during the Negotiation:

- measures of transparency, notification and limitation regarding the deployment, movements and state of operational readiness of the units, as well as regards the stocking of materials;
- procedures of verification of the agreement, including the right to carry out on site inspections;
- clauses aiming at preventing circumvention of engagements and, in particular, avoiding that the redeployment of the forces withdrawn from a region may negatively affect the security of other regions;
- possible exceptions to perform high level exercise.

In the long run, if all the above was achieved, NATO could consider further reductions as well as the reorganization of residual units in order to limit offensive capacities drastically.

THE POSITION OF THE WARSAW PACT

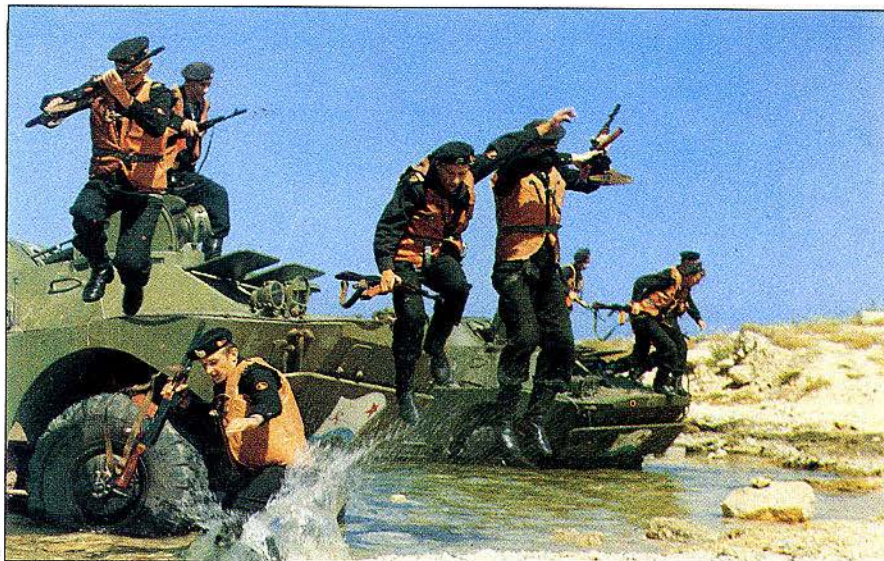
For the Easterners, the most destabilizing armaments — to be thus considered during the Negotiation — are the attack aircraft of tactical aviation, tanks, fighting helicopters, armoured vehicles, artillery, multiple rocket-launchers and mortars: personnel must also be considered.

The agreement must develop in three stages in the span of nine years. During the first stage (between 1991 and 1994) imbalances and asymmetries now existing between the two blocs must be eliminated; forces and armaments must be reduced to a ceiling about 10-15% lower than the minimum level now belonging to one or the other of the two Alliances.

In order to prevent surprise attacks two "ranges of contact" must be enucleated from the Atlantic-Ural area. These include Central Europe and the remaining regions of the continent where the two blocs face each other. In these two ranges the most destabilizing weapons have to be withdrawn, reduced or limited and military activities must be proportionally frozen.

The second stage of the agreement (1994-1997) sees a further joint 25% reduction of forces and armaments as well as reductions in those classes of arms not considered in the first stage. In addition, the remaining forces would be reorganized according to the principle of the so-called "defensive sufficiency" that is in a number that would only guarantee defence.

In the third stage (1997-2000) reduction and reorganization of forces are scheduled



in order to make them unsuitable for an attack and capable only of defensive actions.

With reference to tanks and as regards to NATO proposals mentioned above, we notice the following:

- the Western global limit of 20,000 tanks on each side has been accepted (there is no disagreement even as regards the number of armoured vehicles);
- as regards the area of Central Europe — which, except for Hungary, coincides with the solution of the West — the ceiling of tanks is equal to 8,700 units (against the 8,000 proposed by NATO);
- the highest number of tanks a Nation may have is 14,000 units (against the 12,000 requested by the West);
- tanks located outside the country of origin cannot be more than 4,500 (3,200 for the West).

Eastern proposals do not exclude an initial exchange of data on the force, on the basis of agreed parameters, which may be followed by a series of verifications to make sure of their truthfulness. In any case, during the reducing process and at the end of it a series of verifications must be carried out based on one side "by right" inspections and the use of any means of verification based on the ground, in the air or in the stratosphere.

Roughly speaking the philosophy of the Warsaw Pact does not seem too far away from that of the West as it favours the means and aims at eliminating imbalances; it also bears in mind the need for solutions which may be different according to the area and suitable verifications for each stage of the agreement. The only serious disagreement concerns the kind of armaments to be considered which include systems which the West does not want, for the moment, to deal with and the issue of personnel which must be included in the reckoning.

The Negotiation on Conventional Armed Forces in Europe has started in an atmosphere of optimism, nourished by the outlook of Gorbachev's new course, by the progress of negotiations on strategic weapons

(START) and on chemical weapons and, above all, by the success obtained in Vienna by the Conference on European Security and Cooperation (CESC). Thus, the favourable international situation and the direct participation of all the Countries of the two blocs — together with the involvement of neutral and non-aligned countries provided for in the mandate — lead us to believe that the new negotiation may hope to achieve the success which the MBFR lacked.

Moreover, it seems that also in the East there is a widespread belief that in the present European historical stage peace cannot be based on military strength and that there are no alternatives to the reduction of military potentials. If the new level of stability were based on the present NATO level of forces and on a reorganization of the Soviet potential the West could consider it a success; this result could be a sort of guarantee against increase in future military budgets.

All participants are responsible for the achievement of the objectives of the Negotiation, but we cannot ignore that the attitude of the Great Powers will be determining; during the drafting of these notes (end of May) in Vienna there is a widespread conviction that a short term agreement must be reached. This may be seen from the acceptance by the Soviet Union of many ceilings proposed by the West as regards several systems and, likewise, from the American willingness to reduce the USA contingent in Europe and negotiate on the limitations of the air forces. Since 1945 conventional forces have swallowed up money and men; it is by reducing these, more than by missile arsenals, that America could cancel its budget deficit and the Soviet Union find the resources it needs to improve the fate of its people.

Gen. Mario Sardo

(1) The definition of the territory to be excluded from the agreements has given rise to a Greek-Turkish contentious. In fact, in the indicated area, Turkish forces will not be subject to limitations and Greece believes this could affect the nearby island of Cyprus.

THE MEETING ON SECURITY AND COOPERATION IN EUROPE



CONCLUSION OF THE VIENNA

REVISION MEETING OF THE C.S.C.E.

On 19 January, 1989 the Vienna Revision Meeting of the Conference on Security and Cooperation in Europe (CSCE) eventually came to an end; a few days earlier, on 10 January, the parallel Consultations for the Mandate for the new negotiation on conventional Armed Forces in Europe, had also ended.

At this point one naturally wonders in what measure these events affect the subject of military security.





For a better understanding of the importance of what occurred in the Austrian capital it is absolutely necessary to recall some essential precedents.

The starting point of the entire process of the CSCE is the Helsinki Final Act, undersigned in August, 1975 by 35 Governments and precisely by all the countries of Europe, excluding Albania, plus the United States and Canada.

In Helsinki it was established to summon periodic meetings for "Revision and/or Follow Through", with the double task of making sure the provisions of the Final Act are applied correctly and decisions taken (the so-called "Mandates") on the future developments of the CSCE process. Meetings of this kind have been held in Belgrade (1977-78), Madrid (1980-83) and in Vienna precisely (1986-89). The Madrid meeting, one of the most important stages of the process, had decided on summoning, as a "sub-follow-through" the "Conference on confidence building measures and security an on Disarmament in Europe (CDE)", advancing its division into two different stages:

- 1st stage, regarding the adoption of a set of measures aiming at confidence building and security (CSBM);
- 2nd stage, to be defined during a future follow-through meeting taking account of the results achieved in the first stage, regarding conventional disarmament in Europe (1).

The Vienna Meeting, opened on 4

November, 1986, under the best of omens and highest expectations mirroring the atmosphere of detente now present in East/West relations, gradually came to a standstill due to remarkable differences of opinion, and thus of negotiat positions, of the three attending parties, that is NATO, the Warsaw Pact, (WP) and Neutral and Non-Aligned countries (NNA). The standstill concerned all sectors of the CSCE (1st basket: "Principles and Military Security"; 2nd basket: "Economy"; 3rd basket: "Human Rights"), but was particularly marked on the subject of military security, since this was the most delicate subject, hard to compromise on.

In this respect, I here wish to summarize the initial standpoints of the three deployments.

The Warsaw Pact wanted above all to modify the so-called Madrid mandate so as to consider, after the Vienna conference, two parallel military negotiations with the participation of all 35 CSCE States, and precisely the continuation of negotiations on security and confidence building measures (CSBM) and the start of a negotiation on the reduction of armaments. In other words, the Eastern Bloc championed the immediate passage to the second stage (disarmament) of the CDE. As regards the confidence building measures, it was in favour of a set of provisions which were decidedly new as compared with the Stockholm ones and included, besides other things, a regulation

"Austria Center Vienna" Seat where the CSCE was held and concluded

regarding independent air and naval areas.

As for NATO, though taking into account the Madrid mandate, believed that the time had not yet come to proceed to the second stage (CDE) since the negotiation on security and confidence building measures started in Stockholm could not be considered ended and there was still a long way to go. Westerners too wanted to continue the after Vienna with two negotiations but these had to be completely independent one from the other and precisely one among the 35 CSCE State to detail and extend the measures adopted in Stockholm and the other, different from the CSCE and limited to the 23 members of the two military Alliances (plus France), aiming at rebalancing the conventional weapons of the two Blocs.

As regards the substance of the security and confidence building measures, NATO strongly opposed the discipline of naval and air activities considered potentially prejudicial to a vital interest of the Alliance, that is the liberty to receive reinforcements from beyond the Atlantic.

Neutral and Non-Aligned countries, though not succeeding in forming a solid and unitarian front, seemed unanimous in the mutual desire to be markedly involved in the future negotiations on conventional weapons, in respect of which though all

agreed to the exclusion thereof of their own forces - they wanted to maintain the right to have their say (the so-called "droit de regard" of the NNA on the "23").

In view of the above we must mention that on 17 February, 1987, the Consultations among the 23 member countries regarding the mandate on conventional stability were started in Vienna. The 23 countries of the two Alliances started special negotiation on conventional stability in Europe (or disarmament as the Warsaw Pact held).

The above talks were held in a constructive climate, but soon enough the standpoints of the two parties proved to be quite different.

As regards the Objectives, NATO advanced the idea of reaching a safe and stable balance of conventional weapons by eliminating the inequalities between the two Blocs; whereas the Warsaw Pact held that the prioritarian objective was reduction of the Armed Forces and conventional weapons of the two Blocs.

As regards the Area of Application, though all agreed on the principle that the negotiation was to cover all Europe from the Atlantic to the Urals, strong differences of opinion arose as regards the Asian areas (Anatolia and Transcaucasia) and the islands.

As regards the Forces, NATO contrary to the Warsaw Pact, was strongly against negotiating on naval forces or tactical nuclear weapons; moreover no agreement was reached on "if and how" to count air forces, amphibious forces and double capacity systems.

Another tricky issue concerned the Autonomy of the negotiation among the 23 countries in respect of the CSCE, also indicated as the problem of the Connecting link between the two future negotiations. NATO insisted on a negotiation on conventional stability completely autonomous as regards participation, subject, procedures and results. The Warsaw pact considered this negotiation among the 23 countries as an activity

having a contingent feature destined to help forward the CSCE process within which, sooner or later, it would have to develop both formally and substantially.

In the Summer of 1988, after works had been carried out for over a year and a half, the two Vienna negotiations were in fact at a standstill on most of the mentioned standpoints, with many cross-vetoes and a widespread negotial intolerance.

Fortunately, since last Autumn, the two negotiations have started to register a marked progress, following a series of favourable political developments, both within the Atlantic Alliance and the wider East/West context.

Among the political factors within the Alliance, mention must be made of the end of the difficult contrast between the United States and France, essentially centred around the "connecting link" between the two future negotiations, which had for a long time jeopardized progress of the works in both forums. The contrast was due to a different concept of the principle of autonomy of the negotiation among the 23 countries which, according to France, was to be more flexible than the one held by the United States. The agreement reached by the two countries at the end of November, again confirmed the substantial autonomy of the negotiation and permitted a better definition of certain aspects of the Western position, advancing among other things certain grants to the Neutral Countries as regards information meetings and the mutual compatibility of the working programmes of the future negotiations. This brought the positions of the parties closer and, as a result, it permitted works to advance constructively.

External political factors may be traced back to two different categories, those of a general character and those directly linked to the negotiation.

Among the former, the Western Capital's perception that the good intentions announced by the Secretary General of the Soviet Union's Communist Party Gorbachev were in fact turning into reality, both as regards human rights and in the military field (applications in all sincerity of the Stockholm agreements and the INF treaty; withdrawal

of the troops in Afghanistan; gradual disengagement from the Third World; announced unilateral cuts in the field of conventional and chemical weapons).

Among the second set of factors, contracts between the major Allies and the Soviet Secretary of State, Schevardnadze during his various visits in the West which, during the consultations among the 23 countries, brought to a general agreement on the forces to be considered and on the area of application, which were then the two main negotial problems.

The end of the year thus proved a decidedly favourable "Moment" which allowed to intensify works and brought to success of negotiations by the middle of January 1989, that is over 26 months after the opening of the negotiation.

At this point I feel it necessary to mention the causes that made negotiations long and difficult.

First it was necessary to cancel the contrasts among the different parties (East/West; West/NNA; East/NNA), and this is quite normal. Unfortunately, there were disagreements among Allies too, such as for example the contrast between the United States and France on the connecting link between the two negotiations and the Greek/Turkish disagreement regarding a minor aspect of the area of application of the 23 countries negotiation; the intolerance of the parties concerned, allied though they are, often made differences of opinion difficult to abolish.

Secondly, controversial aspects were such that they often demanded high level political decisions which were beyond the power of the Vienna delegates (for instance, the problem of the forces to be considered in the negotiation on conventional weapons); it was thus necessary to wait for orders from the Capitals and the respective politico-military joint-allied Organizations.

Moreover, and this is a particular characteristic of CSCE, there was the need to safeguard a balanced progress among the various sectors of the Conference, and thus one party could deem it necessary to "push" in a particular sector (for example that regarding human rights) and "pull on the break" in another sector (the military one for example); The final result of such a "weight and counterweight" action, considering the inevitable reactions of the opposing party, often caused negotiations to slacken.

Lastly, we must remember that in this kind of negotiation the rule of consent holds good and it was really difficult to find full agreement among the 35 countries.

RESULTS OF THE TWO VIENNA NEGOTIATIONS

The result of the two parallel Vienna negotiations rests in the formal adoption of the two texts:

- the "Mandate for the Negotiation on Conventional Armed Forces in Europe", ap-

"Austria Center Vienna" hall where the CSCE was held



proved and initiated on 10 January, 1989 by the 23 representatives of the NATO and Warsaw Pact countries;

- the final document of the CSCE meeting, definitely approved on 15 January, 1989, which as regards military matters is formed by the relative section under "Measures aiming at building confidence and strengthening security and certain aspects of security and disarmament in Europe", which incorporates as its annex the mentioned 23 countries mandate, according to the principle that the Negotiation on Conventional Armed Forces will have to take place in the CSCE framework.

Extraxts of the most interesting parts are published separately.

It making a general consideration, I must here mention that the two mandates and the relative negotiations co-exist in full autonomy. The net separation between the two negotiations, pursued with determination by NATO and actually accepted by the Warsaw Pact too, is in fact acknowledged in the 35 countries document from which, as later better specified, we evict that the search for conventional stability is at present a completely autonomous exercise of a certain number of States, the "23": the NNA were not involved at the beginning, will not be able to evaluate the results in the near future and lastly will not be in a position to deliberate on its subsequent development; however, in accordance with the principle of the indivisibility of security, Neutral Countries will be periodically updated on negotiations by the 23 and will thus be able to follow the progress achieved.

I shall now go onto more detailed considerations, separating the two documents and starting with the CSCE one.

MEASURES AIMING AT BUILDING CONFIDENCE AND STRENGTHENING SECURITY AND CERTAIN OTHER ASPECTS OF SECURITY AND DISARMAMENT IN EUROPE

The most important parts of the document are those regarding the two military negotiations and the link between them:

- Negotiation on the measures aiming at building confidence and strengthening security.

It is undoubtedly the most important part of the text in which the opening of a specific negotiation is announced for 9 March, 1989. This follows the Stockholm Conference and aims at establishing and adopting a new serie of CSBM designed to reduce the risk of a military confrontation in Europe.

It must be mentioned that the Warsaw Pact's request to include air and naval activities in the discipline of the future CSBM and which NATO deemed unacceptable, fell through. It is likely however that the Warsaw Pact may bring up the subject in the substantive negotiation;

- Negotiation on Conventional Armed Forces in Europe.

Extract from the Mandate for the Negotiation on Conventional Armed Forces

«MANDATE FOR THE NEGOTIATION ON CONVENTIONAL ARMED FORCES IN EUROPE»

OBJECTIVE AND METHODS

The objective of the Negotiation will be the strengthening of stability and security in Europe through the establishment of a stable and secure balance, at lower levels than at present, of conventional armed forces, which include conventional armaments and equipment: the elimination of inequalities liable to prejudice stability and security; and the prioritarian elimination of the capacity to launch surprise attacks and start large scale offensive actions. All and each participant must contribute to the fulfillment of these objectives.

These objectives will be fulfilled by applying militarily important measures, such as, among others, cuts, limitations, redeployment provisions, equal ceilings and co-related measures.

To fulfill the above objective, measures for the entire area of application should be adopted with provisions, if and where appropriate, of regional differentiation aiming at obviating disparities in the area of application and preventing circumventions.

The process of strengthening stability and security should be achieved gradually, so as to guarantee that the security of each participant will not at any stage be injured.

SPHERE AND AREA OF APPLICATION

Conventional armed forces will be the subject of the Negotiation: these include conventional armaments and equipment belonging to Participants and group based on the territory of Participants in Europe, from the Atlantic to the Urals.

The existence of multiple capacities will not be a principle apt to modify the sphere of the Negotiation:

- no conventional armament or equipment will be excluded from the subject of the Negotiation only for the fact that it may have other capacities besides conventional ones. The above armaments and equipment will not be considered in a separate category;
- nuclear weapons will not be considered in the above Negotiation.

At first, particular attention will be paid to those forces directly connected with the fulfillment of the above defined objectives of the Negotiation.

Naval forces and chemical weapons will not be dealt with.

The area of application will be the entire ground territory of the Participants in Europe, from the Atlantic to the Urals, which includes all European insular territories of Participants. As regards the Soviet Union, the area of application includes all the territory west of the river Ural and the Caspian Sea. As regards Turkey, the area of application includes the territory of Turkey north and west of the following line:

intersection point of the boundary with the 39 parallel, Muradive, Patnos, Karayazi, Tekman, Kemaliye, Feki, Ceyhan, Dogankent, Gözve and from there to the sea.

EXCHANGE OF INFORMATION AND VERIFICATIONS

Compliance with the provisions of any agreement will be ascertained by an efficacious and rigid regime of verifications which, among other things, will include the right to on-site inspections and exchange of information.

There will be an exchange of sufficiently detailed information to allow a significant comparison of the capacities of the forces concerned. Information will be detailed enough also to serve as the basis for the verification of compliance with provisions.

The specific modalities of verifications and the exchange of information, including the degree of detail of the information itself, and the order with which they will be exchanged, will be agreed upon during the Negotiation.

* Conventional armed forces include conventional armaments and equipment.

The negotiation must be carried out within the "framework of the CSCE process", but it is without any doubt autonomous, as desired by the Westerners, because it must be held according to the agenda, procedures, modalities and working programme agreed upon by the participating States alone; but, above all, no other State may interfere on its outcome. Moreover, progress achieved during the negotiation may not be "evaluated", as expected by the Neutral Countries, from the CSCE Meeting to be held in Helsinki in March, 1992, but may only be the

subject of an "exchange of opinions".

- Meetings for the exchange of opinions and information regarding the progress of the negotiation on Conventional Armed Forces. This was one of the most debated subject and the one which, more than any other, contributed to increase the NNA's suspicions on the West's supposed unwillingness to inform them on the progress of the works being carried out by the "23".

The text finally agreed upon represents a satisfactory balance between the need for "information" shown by Neutral Countries

Extract from the final document of the CSCE Vienna Conference.

MEASURES AIMING AT BUILDING CONFIDENCE AND SECURITY AND SOME OTHER ASPECTS OF SECURITY AND DISARMAMENT IN EUROPE

NEW EFFORTS FOR SECURITY AND DISARMAMENT IN EUROPE

The Participating States,

reached an agreement according to which these efforts should be divided in the following manner:

NEGOTIATIONS ON THE MEASURES AIMING AT BUILDING CONFIDENCE AND SECURITY

The participating States agreed that Negotiations will be held on Measures Aiming at Strengthening Confidence and Security with the purpose of developing and widening the results already achieved during the Stockholm Conference with the aim of elaborating and adopting a new set of measures aiming at strengthening mutually complementary confidence and security designed to reduce the risk of a military confrontation in Europe.

Such Negotiations will take place in conformity to the Madrid mandate.

The decisions made by the preparatory Meeting held in Helsinki from 25 October to 11 November, 1983 (compare Annex 11) will be applied, *mutatis mutandis*.

The above negotiations will be held in Vienna, starting in the week beginning on 6 March, 1989.

The next Meeting of the participating States, in the framework of the CSCE Follow-Through Meetings, which will be held in Helsinki starting on 24 March 1992, will evaluate the progress achieved during the above negotiations.

NEGOTIATION ON CONVENTIONAL ARMED FORCES IN EUROPE

The negotiation on Conventional Armed Forces in Europe will be carried out as agreed upon by the States indicated in the mandate contained in the President's declaration as according to Annex III of the present Document, which have agreed upon the agenda, the rules of procedures and the organizational methods of negotiations and will define dates and results. The above negotiations will be carried out in the framework of the CSCE process.

The above negotiations will take place in Vienna, starting the week beginning on 6 March, 1989.

During the next CSCE Follow-Through Meeting of participating States which will be held in Helsinki starting 24 March, 1992, an exchange of opinions on the progress achieved during negotiations will take place.

MEETING FOR AN EXCHANGE OF OPINIONS AND INFORMATION REGARDING PROGRESS OF THE NEGOTIATION ON CONVENTIONAL ARMED FORCES IN EUROPE

It has been agreed that participating States will hold meetings for an exchange of opinions and information regarding the progress of the Negotiation on Conventional Armed Forces in Europe.

These meetings will be held at least twice during each session of the Negotiation on Conventional Armed Forces in Europe.

Provisions on the practical modalities regarding such meetings are contained in Annex IV of the present Document.

During the above meetings substantial information will be supplied by participants to the Negotiation on Conventional Armed Forces in Europe. Information will concern development, progress and results of negotiations with the aim of allowing each participating State to evaluate progress. Participants have committed themselves to take into consideration, during negotiations, opinions expressed during the meetings by other participating States in respect of their own security.

Information on a bilateral basis will also be supplied.

The next CSCE Follow-Through Meeting which will be held in Helsinki starting 24 March, 1992, will take into consideration the functionality of the above provisions.

Bearing in mind pertinent provisions of the Final Act and of the Conclusive Document of the Madrid Mandate and having taken into consideration the results achieved during the two negotiations, in the light of other negotiations pertaining to security and disarmament in Europe, a future meeting within the CSCE Follow Through Meetings will consider the most appropriate means and methods to allow participating States to pursue in their efforts in favour of security and disarmament in Europe, including the issue regarding the integration of the Madrid mandate for the following stage of the Conference on the Measure Aiming at Building Confidence and Security and on Disarmament in Europe.

and that of the autonomy of the negotiation, defended by the West; in practice, by granting some extra information meeting (virtually once a month, besides the initial and final meeting of each session of the negotiation on conventional forces) and by promising to consider the NNA's opinion on aspects strictly connected with their security, Nato managed to avoid the NNA's opinions becoming binding for the "23" and, thus, any third Country interference.

Lastly, it must be underlined that the final paragraph of the text regarding the fulfilment of the Madrid provisions on the possibility of passing to the second stage of the CDE (disarmament), once again confirms, in a wretchedly vague manner, that a decision on the matter will be made in a "future" follow-through CSCE Meeting.

As already mentioned, this is a success for NATO which has always maintained that the time has not yet come to go into a process of Paneuropean disarmament in the CSCE framework.

In this respect, we must state that the decision to pass to the second CDE stage, has not been made in Vienna and may not necessarily be made in Helsinki (in fact the document speaks of decisions to be made by "a future" and not by "the future" follow-through CSCE Meeting).

MANDATE FOR THE NEGOTIATION ON CONVENTIONAL ARMED FORCES IN EUROPE

First a brief mention of how the title of the negotiation was reached, since it is an important example of the willingness of the two Parties to achieve acceptable compromises. After having abandoned the initial positions which, though supported for a long time, proved conceptually too far apart, (that is "stability" for NATO and "cuts" for the Warsaw Pact), an agreement on the title "Negotiation on the Conventional Armed Forces in Europe" was finally reached. A footnote to the title explains that conventional Armed Forces include conventional armaments and equipment. Mention of armaments, which in fact also appears in the specific sector titled "Objectives and methods" confirms the Warsaw Pact's concern that the West, in the unsuccessful wake of the MBFR, may identify the Armed Forces only with the troops.

OBJECTIVE AND METHODS

Having declared the primary objective of strengthening stability and security in Europe, the text explains that this aim will have to be pursued by the establishment of a stable and secure balance of the Armed Forces at lower levels than at present and by eliminating differences and the capacity to carry out surprise attacks and/or large scale offensive actions. Objectives will have to be achieved by the application of measures



Hofburg Palace, where the two new military negotiations were held.

which include reductions, limitations and relocations.

The application of such measures will have to be fulfilled with criteria of regional differentiation and will have to avoid circumventions (to avoid, for example, that forces withdrawn from a particular region, instead of being eliminated, be redeployed elsewhere). It may thus be seen that the fears of the Warsaw Pact regarding the methods employed to reach this balance (reductions) are taken into account, as are those of NATO regarding possible geographic circumventions.

Sphere of application

The sphere of application, that is of the forces under reference, is certainly the most important part of the mandate: it establishes that the subject of the negotiation will be ground based conventional Armed Forces. This excludes naval forces; this exclusion is confirmed by a specific clause.

However, the words "ground based" with the clause excluding naval forces, creates an area of potential ambiguity as regards amphibious troops and ground based naval aviation.

Another ambiguity concerns air forces which are never expressly mentioned, though they may be included in the words "ground based". This ambiguity also arises in the passage stating that negotiations will start on the forces directly connected to the mentioned capacity to launch surprise attacks and start large scale offensives. What these forces are has not been explained. As known, according to the West they include tanks, artilleries, troop transport armoured vehicles, whereas aircraft should be taken into account only in a further stage of the negotiation. The Warsaw Pact instead has repeatedly stated that attack aircraft too should be taken into consideration immediately.

We have reason to believe that the negotiation will be very "lively" on these points.

NATO has succeeded in turning down (see the specific clause) the East's request to include tactical nuclear weapons and chemical weapons.

As regards double capacity systems, the future attitude is formulated "in the negative", according to a wording aiming at excluding personally suited interpretations.

There are two sentences requested by NATO: the first says: "the existence of multiple capacities will not be reason enough to modify the subject of the negotiation" which is and will remain strictly conventional. This formula assures the West that the Warsaw Pact, with the excuse of negotiating on double capacity systems, will not try to re-introduce tactical nuclear systems.

The second sentence states that various capacity armament and equipment "will not be considered within a separate category". This formulation, confirms and reinforces the previous principle and aims at avoiding a privileged and/or differentiated treatment of conventional weapons cannot by any means be divided into separate categories of only conventional weapons and weapons having various capacities too.

Despite the ability of the two "wordings" it is obvious that the danger of re-introducing double capacity systems is all but eliminated. In any case, a possible reduction of double capacity systems, even if labelled conventional, will impugn the full freedom of NATO's nuclear option. This is why the starting standpoint of the Alliance was not to even mention double capacity systems.

We must however acknowledge a certain dose of truth in the Soviet statement according to which double capacity systems prevail in the last generation armaments and therefore, sooner or later, the problem will have to be faced and solved.

As for the Warsaw Pact, it was content with a sole "wording" and precisely: "No conventional armament or equipment will be excluded from the negotiation for the fact that it may have other capacities besides the conventional one"; the Eastern Bloc thus deems it may be sure that the West, confirming to the specific clause that nuclear weapons will not be the subject of the negotiation, will not attempt to exclude all double capacity systems from the negotiation with the excuse that they have a nuclear capacity.

To complete the picture, it is necessary to remember that the Warsaw Pact, once the

negotiations starts dealing with aircraft in general, will return on the subject - as it as repeatedly tried to do during the mandate stage - and will try to exclude defence aircraft from the reckoning to make up for the West's refusal to include carrier based attack naval aviation.

Area of application

The problem of the area of application of the negotiation requires a detailed survey; it was the last serious drawback to the conclusion of the works.

The following were the principal point of the above:

- NATO's concern that all the territories of Soviet Transcaucasia should be included in the phrase "from the Atlantic to the Urals";

- Turkey's national interest, supported by NATO, aiming at excluding a large part of its territory (south-eastern portion of Anatolia) in which to preserve freedom of manoeuvre to face the hovering threat by Syria, Iran and Irak (countries "outside the area" of both the "23" and the "35");

- the obvious and contrasting Soviet interest in reducing to the minimum the exempted territories of Anatolia to avoid the danger of circumvention (for example, a concentration of NATO and/or Turkish troops in the exempted area) and obtain, as a compensation, the exclusion of part of its own territory close to Iran;

- Spain and Portugal's demand to see their Atlantic island (the Canaries and the Azores/Madeira) explicitly included in the mandate as a formal acknowledgement of their belonging to Europe;

- the converging Soviet interest in the inclusion of the Azores in the negotiation, important point of operational and logistic support for NATO.

Though the Soviet Union quickly abandoned the request of a territorial exemption "in compensation" for the area excluded in Anatolia, it insisted with great determination on the reduction of the extension of the above area and, above all, on the inclusion in the area of application of the Incirlik air base (immediately East of Adana). The result of this particular negotiation, essentially carried out by Turkey and the Soviet Union, led to the definition of an area (see the map above right) roughly between the Turkish and the Soviet demands with the inclusion of Incirlik.

In this respect we must underline that the language of the mandate does not indicate the terminal site on the Anatolian coast of the boundary line between the "excluded" area and the "included" one, but only says that the end of the line must reach the sea ("... Dogankent, Gözne and from there to the sea") (see map on the side).

This is a margin of ambiguity which mir-



rors the Greek/Turkish last moment contrast, centred on the need - for stated reasons of national security - to include (for the Greeks) or not (for the Turks) the port of Mersin and the relative military installations in the area of application; since the two Delegations concerned were intolerant on the subject. Negotiators were "compelled" to turn to the above mentioned language inaccuracy or ambiguity which allows the two countries concerned to give their own personal interpretation regarding the terminal part of the line (3).

As regards the islands, the above mentioned mutual interests between the USSR and the States to which the remote island-belong (Azzorres, Madeira and the Canaries) caused the latter to be included in the area of application. Through a subtle game of compensations and negotial balances this inclusion was later extended to the Svalbard, Faroer, Francis Joseph's Land and New Zemlja islands. It must be mentioned however that the island owing States asked that this subject should not be dealt with in the text of the Mandate, but in specific "National declarations" annexed at the end of the document.

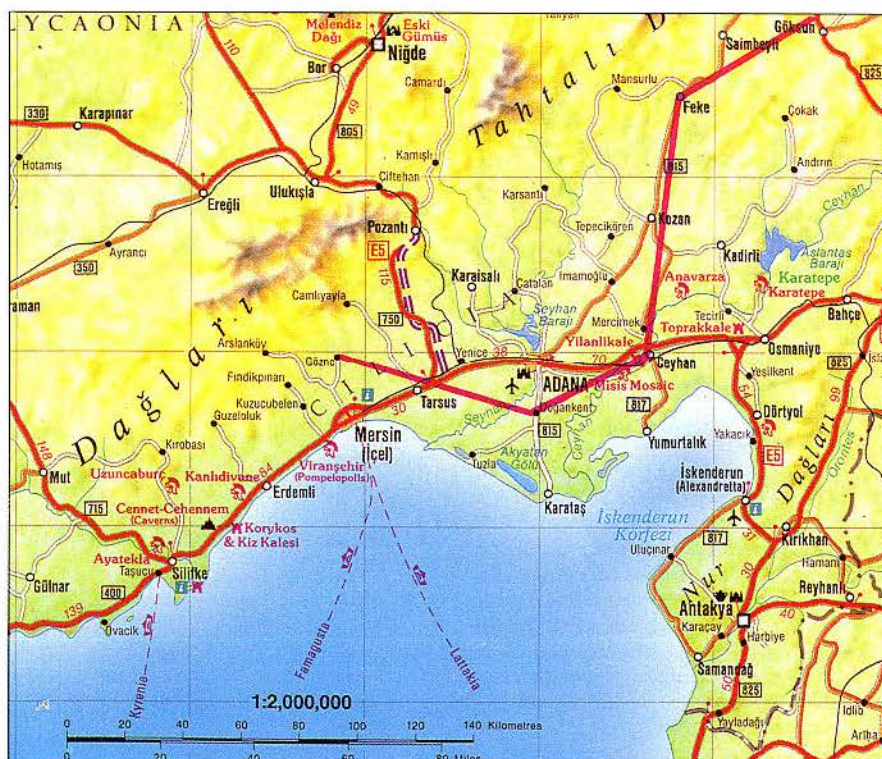
Lastly, no mention is made in the mandate of adjacent or territorial seas and this, according to the NATO standpoint, not to involve in any way the maritime areas of the negotiation as this could lead to considering the naval forces.

Exchange of information and verifications

This is a very new aspect by which the Soviet Union - in the wake of the INF negotiation - explicitly accepts inspections on its territory, without being able to oppose a refusal.

Below

The area south and east of the Feke-Ceyhan-Dogankent-Gözne line is the one excluded from the area of application. The port of Mersin is the subject of the Greek/Turkish disagreement.



Exchanges of detailed data on the organization, consistency and location of forces are also foreseen.

CONCLUSIONS AND OUTLOOKS

All the Foreign Affairs Ministers who attended the closing ceremony of the Vienna Conference underlined that the final Document of the CSCE may represent a milestone in the history of our Continent.

Of course, most of the Western speakers focused their attention on the important progress achieved as regards human rights, but no one overlooked the importance and the "extraordinary character" of that part of the document regarding the military subject, which gave rise to the opening of two military negotiations, one of which, the one on conventional forces, was considered as "a wonderful opportunity to face the heart of the matter of European security".

The importance of this certainly did not escape the Soviet Union which rightly feels it has granted things which, only two years ago, nobody dared expect.

In fact, NATO negotiators may rightly state that most of their initial positions have been accepted, grudgingly or not, by the Warsaw Pact and the Neutral Countries and more precisely:

- as regards the military aspect of the CSCE and the connecting link between the two substantive negotiation: the re-statement that the time has not yet come to go onto a process of Paneuropean disarmament, that is to the second stage of the CDE; the substantial autonomy of the negotiation among the "23" from the interference of other States; the absence of a specific mention of the extension of the CSBM discipline to independent air and naval activities;
- as regards the mandate for the negotiation on conventional Armed Forces: the statement that the primary objective is the strengthening of stability and security in Europe and not only the reduction of forces; a formulation which hinders or postpones the inclusion of air forces and double capacity system as such among the forces to be considered; the explicit exclusion from the negotiation of naval forces and nuclear and chemical armaments; the inclusion of all Soviet Transcaucasia in the area of application of the agreements and the exclusion of about a quarter of Anatolia; lastly, on-site inspections, without the chance of opposing a refusal, to verify the measures adopted.

In brief, we may state that the results of the Vienna mandatory works as regards military security, are an encouraging political and diplomatic success, achieved also in the wake of favourable international events. However, the true and substantial value of these agreements may only be measured by the progress achieved during the two substance negotiations when the above mentioned language ambiguities of the texts will undoubtedly come to light.

However, if we turn more specifically to

the future, we may easily advance which areas will become a problem during negotiations. As regards the negotiation on the measures for building confidence and security, NATO countries must be ready to reject the following Warsaw Pact proposals, already widely publicized;

- the extension of the CSBM discipline to independent naval and air activities;
- the adoption of highly limiting measures as regards military activities (the so-called "constraining measures"), that is reduction in number and extension of exercises and, in particular, the prohibition to carry several exercises at the same time and in the same area;
- the establishment of special regime security areas, such as demilitarized corridors in-between the boundary of the two Alliances and of the area devoid of nuclear weapons;
- military budget cuts.

Considering the negotiation on conventional Armed Forces, the foreseeable points of contrast may be summarized as follows:

- categories of forces to be considered, with particular reference to the above (including embarked attack air forces and defence aircraft) and amphibious forces;
- the rules adopted for the reckoning of forces: in particular the level of data disaggregation and the manner to deal with stockpiled weapons and under staffed units (the Warsaw Pact would like combat ready units to be counted separately);
- mutual reports and pre-eminence of the various stabilizing measures provided for (relocation, reductions and limitations);
- area of application: an accurate definition of the exemption area in Anatolia and kind of area approach to be adopted, that is global, regional (and in this case a definition of the regions) or both contemporaneously.

A difficult task awaits Vienna negotiators. In this respect, we must observe that, while the CSBM negotiation will almost certainly have to end with some kind of results by the next Helsinki follow-through Meeting (March 1992), the negotiation on conventional forces, by virtue of its strongly defended independence, has no set limits of time and has no intention of setting them and it is thus absolutely impossible to foresee how long it may last.

Apart from this, however, what really counts is the positive outcome for the West.

This may be achieved only if Western negotiators, on the basis of timely and clear indications, will be able to show the necessary determination and ability, both in formulating and supporting their own proposals and in driving back and rejecting the Warsaw Pact and NNA Countries' inevitable attacks.

NOTE

(1) It is here necessary to mention that, according to the Madrid Mandate, the Vienna Meeting, having been "one of the future" follow-through meetings, was entitled to decide on the future of the CDE and on the specific subject of its coming negotial season.

(2) The debate on this subject, arose during the negotiation among the 23 countries, but was in fact carried on during the negotiation of the 35 countries because of the NNA Countries' insistence to have their say on the subject.

(3) Besides considerations of substance, the Greek/Turkish disagreement delayed the definition of the mandate and thus prevented the final Document of the CSCE to be annexed as formerly agreed, blocking for several days, any progress in both the Vienna negotiations, just when works were nearly over.



Brigadier Piero Bonabello attended the Military Academy, the Branch Service School, the War Institute and is graduated in Political Science.

He commanded the 13th tank battalion and was deputy-commander of the "Mame-li" armoured Brigade.

He carried out General Staff tasks in the Commands of the 3 Army Corps and the "Ariete" Division; in particular, he occupied the post of Deputy General Staff Chief of the 5 Army Corps Command. Later on he attended the Royal College of Defence Studies in London and was Military Advisor to the Italian Delegation of the CSCE. At present he occupies the post of Military Advisor of the Italian Delegation attending the negotiation on conventional Armed Forces in Europe.

Gen. Piero Bonabello

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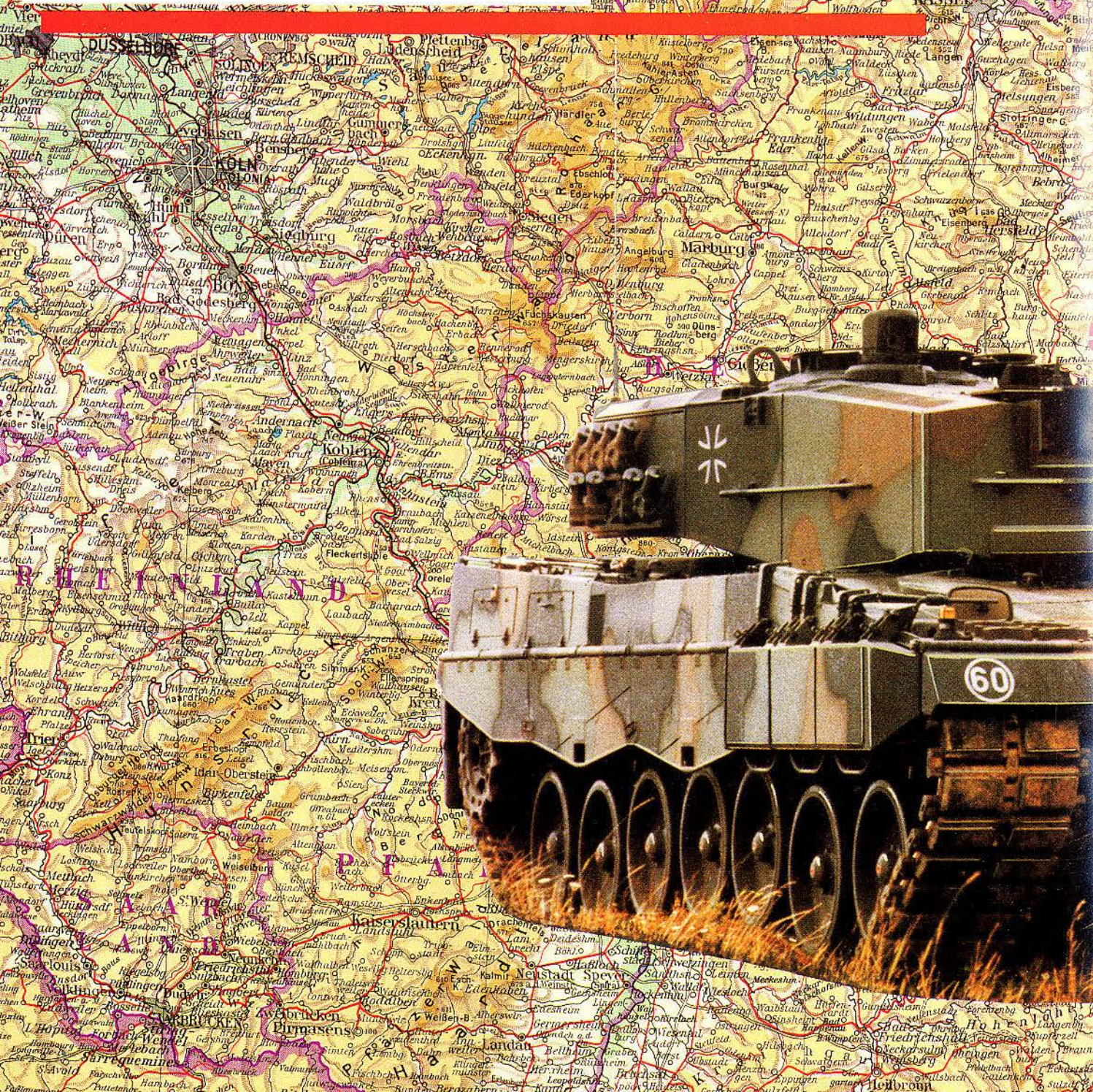


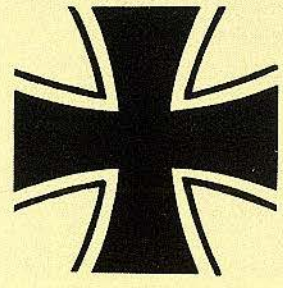
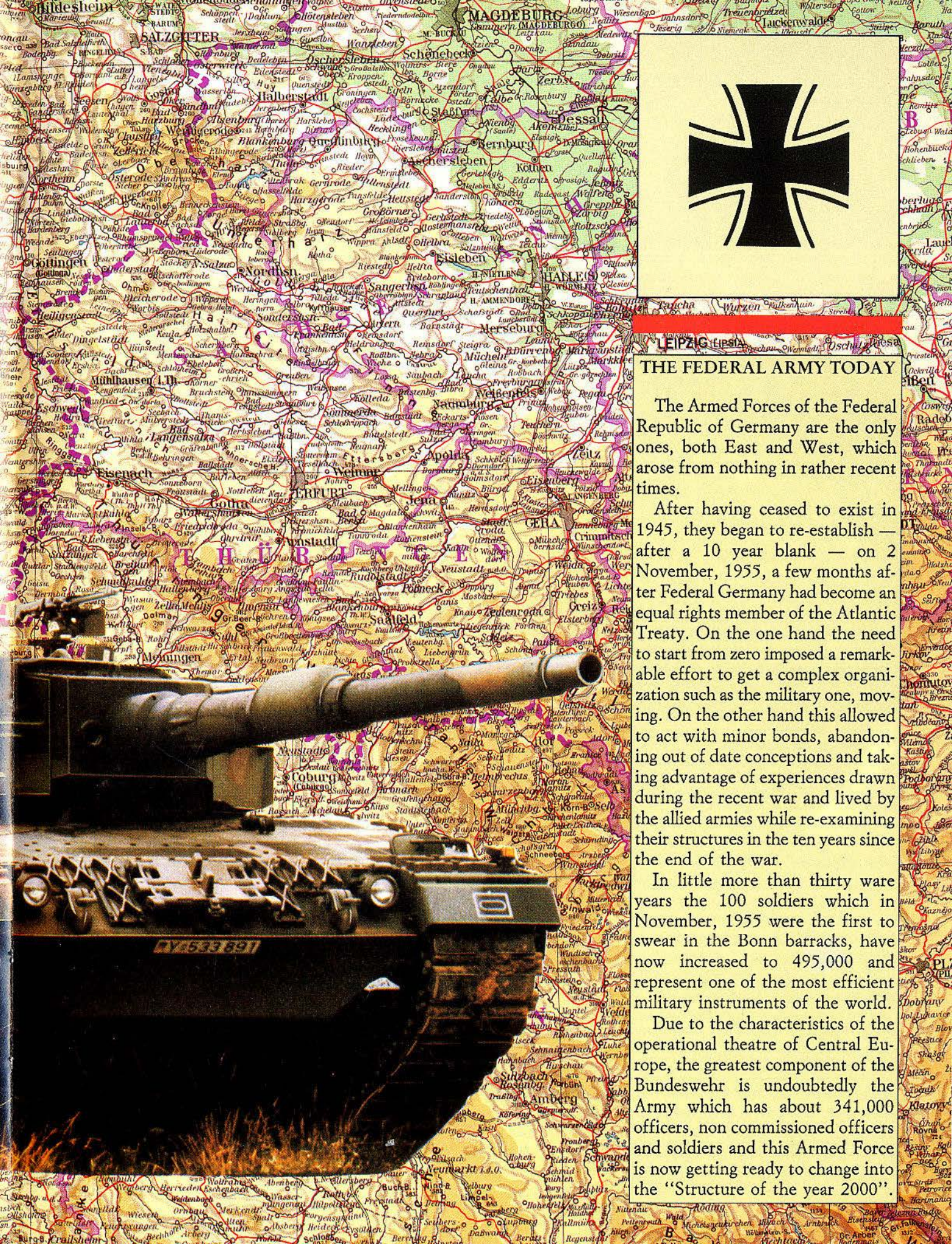
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«STRUCTURE 2000» OF THE ARMY OF THE FEDERAL REPUBLIC OF GERMANY





LEIPZIG (LIPSA)

THE FEDERAL ARMY TODAY

The Armed Forces of the Federal Republic of Germany are the only ones, both East and West, which arose from nothing in rather recent times.

After having ceased to exist in 1945, they began to re-establish — after a 10 year blank — on 2 November, 1955, a few months after Federal Germany had become an equal rights member of the Atlantic Treaty. On the one hand the need to start from zero imposed a remarkable effort to get a complex organization such as the military one, moving. On the other hand this allowed to act with minor bonds, abandoning out of date conceptions and taking advantage of experiences drawn during the recent war and lived by the allied armies while re-examining their structures in the ten years since the end of the war.

In little more than thirty years the 100 soldiers which in November, 1955 were the first to swear in the Bonn barracks, have now increased to 495,000 and represent one of the most efficient military instruments of the world.

Due to the characteristics of the operational theatre of Central Europe, the greatest component of the Bundeswehr is undoubtedly the Army which has about 341,000 officers, non commissioned officers and soldiers and this Armed Force is now getting ready to change into the "Structure of the year 2000".



Tasks

The command of the Armed Forces in peacetime is the responsibility of the Ministry of Defence, whereas in emergency it is entrusted to the Federal Chancellor. Each Armed Force is headed by an Inspector which in turn depends on the Defence Inspector who acts as military counsellor for the Government.

The authorities in charge of employing the Armed Forces use them to guarantee the security of the nation according to NATO agreements;

- in peacetime, by maintaining a level of operational readiness allowing them to intervene readily, together with the Allies, to prevent the national territory from being violated;
- in times of crisis, guaranteeing the necessary decisional freedom to the Political Authorities;
- in case of war, driving back all attacks, by means of advanced defence proceedings, to safeguard the integrity of the national territory.

Organizational division of the army

The ground instrument is formed by the Field Army and the Territorial Army (1) and is now based on the so-called "Structure 4" which, since 1979 has modified the previous organization called "Structure 3".

Virtually since 1955, every 8 or 10 years there has been a modernizing cycle of units and materials, to harmonize doctrinal novelties, means and organization in the light of the available human and financial resources and with an attentive eye to the scientific and technological progress underway.

Nowadays we are witnessing the beginning of a transformation cycle, called "Structure 2000" in view of the closing millennium and of which we shall later speak. According to "Structure 4" just recently completed, the Field Army is divided into 3 Army Corps and 12 Divisions, 6 of which armoured, 4 mechanized, an airborne troop and a mountain troop.

During operations, the three Army Corps take position on the frontier with the German Democratic Republic, with Czechoslovakia and with Austria, flanking or alternating its own Divisions, from North to South, to those of Denmark, Holland, Great Britain, Belgium, United States and Canada which, on German soil, number ever since the end of the war, over 200,000 men.

The Divisions of the Federal Army are mainly based on armoured and mechanized Brigades.

Nowadays there are 17 armoured and 15 mechanized Brigades (besides a mountain Brigade and 3 airborne troop Brigades).

The basic Army battalions and tactical supports are thus marked by a high degree of standardization since the basic forms are faithfully repeated in all the elementary Superior Units.

The main characteristics of this instrument are thus extreme mobility, a high firing capacity, especially anti-tank, and a great organizational flexibility. It must be noticed that in the presence of different morphologic characteristics of the Battle Position, both the Federal units and the allied ones maintain an unvaried tank/mechanized feature which may be seen as the will to react to an eventual military attack by promptly counterattacking in an attempt to recover the territorial integrity of Federal Germany.

"Structure 4" in brief was intended to pursue a higher than in the past mobility of the units, a greater anti-tank firing capacity and a larger standardization.

The aims set in 1979 have now been reached, but in the meantime certain circumstances and basic fac-

tors have changed so that the experts of the various planning offices of the Ministry of Defence and of the General Staffs have succeeded in drawing up the new "Structure 2000".

NEW FACTORS AND ENSUING PROVISIONS

At present, in the framework of the German defensive concept the various agreements on disarmament whether already reached or yet to be defined between East and West play a very important role. Logically enough Federal Germany wishes to have its say on this subject, since in case of conflict the air-ground encounter (conventional or nuclear) between the two blocs would take place on its soil.

Nuclear disarmament and the increasing importance of forces require as a result the Federal Army to be in the front line even more, if possible, than in the past.

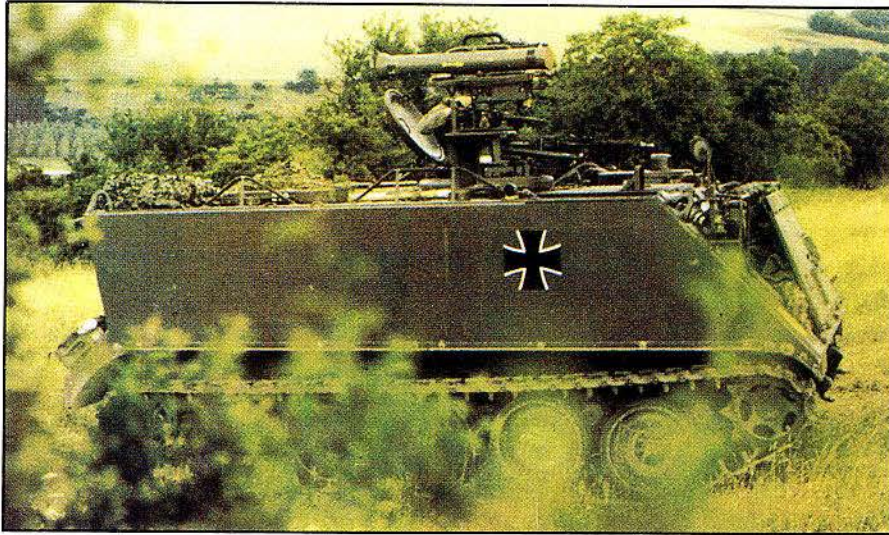
Before improving the efficiency of the Armed Forces, the new situations apt to emphasize the deterrence of the Army are necessary in the political field.

These situations, already spotted out by the experts and discussed in the appropriate Forums, regard a limitation of the opposing forces' offensive means, the survey of methods designed to prevent surprise attacks by one of the two parties concerned, the removal of the armoured Superior Units from the boundaries, greater controls on the mass movements of troops for exercises, the exchange of observer officers, in one word the dilatation of the Warning Time.

Much work may be done on all these possible solutions and there are many opportunities to increment the margins of security.

Technically speaking, however, the residual margins for the improvement of conventional forces is rather limited, both East and West.

In fact, a strengthening of the conventional is conditioned by two factors, which are the basis for the



From top to bottom

Troop transport vehicle "M113" equipped with a Milan antitank missile system.

Multiplo 110 "SF2" rocket launcher.
"MARDER 1A2" Combat vehicle.

study of "Structure 2000" of the Federal Army and which, in a more or less similar manner, are to be found throughout the Western World. These two factors are the lack of financial resources and personnel.

These two difficulties may be counterbalanced by two positive elements, that is the goals achieved by Western technology and the opportunity to organize the employment of reservists.

The problem of the decrease of available resources is also connected, within certain limits, with the logic of disarmament. The objective welfare of the German Federal Republic is such that there is no need to haggle over the Defence budget, but no politician, in a generalized atmosphere of harmony between the two blocs, dares go before the electorate and support the need for higher Defence expenditure. Moreover, the population is now more aware of the ecological threat than of that of the Soviet Bear, it wants greater guarantees in the social field, wants to help Third World countries and is annoyed when its attention is called to the fact that the Red Army continues to improve its quality and to remain unattainable as regards quantity.

Thus, the German Defence budget, high though it may be — about 50 million marks a year — does not increase by an annual 3% as NATO hoped for, but also loses ground due to inflation which weighs by about 2% on the German currency.

The personnel problem is bound to the demographic decrease and the ensuing availability of conscripts who form 51.5% of the force at arms (2).

To obviate this difficulty which will soon be felt in Italy too, the Bundeswehr has sought a solution.

Last year Parliament approved a provision which sanctioned the extension of the term of service from 15 to 18 months (starting in the 1989 summer) which will result in a decrease of about 20,000 men yearly. Moreover, the 1988 budget approved the employment of extra funds for the percentual increase in professional military men on a



prolonged term of service in the ranks of the unit. In this respect it must be mentioned that due to a certain favour enjoyed by the Armed Forces in certain layers of the German national society and thanks to the attentive campaign for the promotion of enlistment, the federal Army has no difficulty at the time being at least, in feeling the by open competition for the various categories of personnel.

An intense activity in Personnel Offices and Departments recently permitted, with the support of political authorities, to pass a series of facilities consisting in prizes in case the term of service is prolonged and in better conditions for over hours and provisions aiming at decontrolling promotions for Officers in the higher ranks.

The employment of reservists is another aspect of importance ensuring the decrease in population.

In fact, despite provisions regarding the extension of the term of service and enlistment for standing service or extended service personnel, it is advanced that starting in

1995 it will no longer be possible to have the 320,000 men now available for active service in the Army and that there will be an initial deficiency of 30,000 men destined to increase in time. Hence the need to give reservists a primary role in the maintenance of a satisfactory degree of operational readiness of the units which will partly become "cadre", a great training engagement and no small problems with the working world which will have to yield reservists to the army for annual updating cycles (3).

STRUCTURE «2000»

Indicative principles

«Structure 2000» arose between 1985 and 1987 within the Planning Department of Defence General Staff following a logic process which springs from two basic questions:

- "what features must the Bundeswehr of the year 2000 have as regards quantity, quality and organizations in order to perform its tasks?"

- "the units being structurally outlined, how can they be usefully

employed and what contribution can they get from modern technology?"

In seeking a reply four conditions have been borne in mind:

- the need to have forces and means for exploration, to guarantee the longest possible warning time and to avoid operational and strategic surprise;

- the need to have ground and air forces capable of stopping eventual enemy attacks and take immediate initiatives;

- the demand for an efficacious air defence organization to prevent the first enemy attack to determine the paralysis of one's own defensive organization;

- the demand for nuclear weapon carriers to allow flexible and efficacious operations responses.

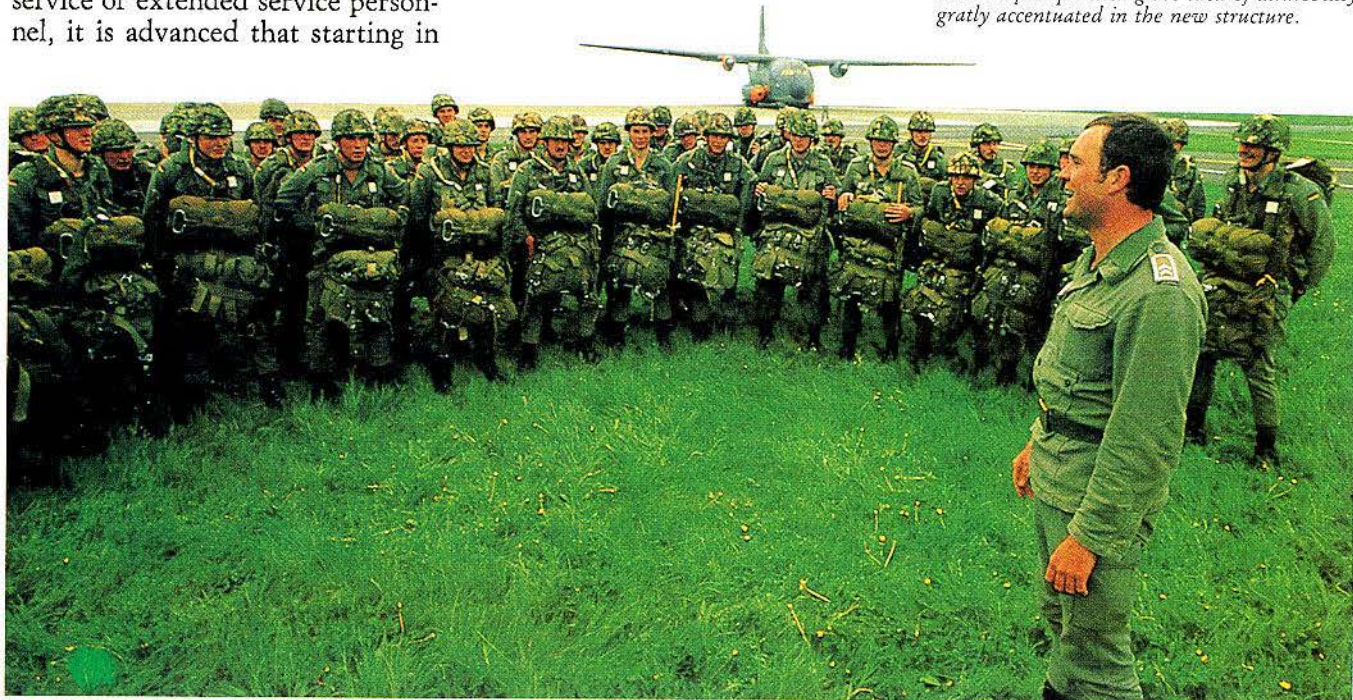
The features of the «Structure 2000» Army have been outlined on the basis of the above. The latter will be based on the following components:

- mechanized tactical forces equipped with a special arresting capacity, for covering and blocking actions and for the defence of boundary positions;

- operational forces, organized in Superior armoured or air-

Below right

Paratroopers practicing the idea of airmobility, greatly accentuated in the new structure.





mechanized Units to establish rapid and long distance defensive deployments or manoeuvre pivots and to counterattack;

- territorial forces (light Infantry) to protect the area of lines of communication and area and objectives of interest.

Another effort for a better employment of resources will have to concern a greater rationalization of sectors common to the different Armed Forces, such as exploration and command and control.

This is not all, however. The degree of intervention efficiency on the various types of likely objectives will have to be subject to a re-examination to reach a definition of the most economic arms systems to be employed for their neutralization.

New organizations

The new organization of the Field Army will continue to have the same organizational steps as before, that is the Army Corps, Divisions and Brigades.

The number of Army Corps and Divisions will not vary, three and twelve respectively, while Brigades will pass from 38 to 41.

There will be 10 armoured or mechanized Divisions and 2 airborne

Divisions.

Brigades will undergo greater changes and in part will have new features:

- 28 of them will continue to be mechanized or armoured with slight differences between them, and compared to the past, limited to the number and type of tanks allotted;

- 4 mechanized Infantry Brigades and the mountain Brigade will be modified to increase their capacity to employ the natural obstacle to stop the enemy;

- 2 light Infantry Brigades will be tasked with the defence and control of the areas of the lines of communication of the Army Corps;

- 2 parachutist Brigades will maintain the past structure;

- 2 air-mechanized Brigades will be the true organizational novelty;

- one Brigade will be the combination of the two previous types (parachutists and helicopters).

We shall now see in what the different Brigades differ.

First of all we shall deal with the 28 armoured or mechanized Brigades: of these 16 (type A) may be considered armoured tout court, in the classical sense of the term and with few differences as compared with the past; they will be particularly suited to carry out interarm operations marked by high mobility and

the mechanized men will be destined to combat mainly from the vehicle.

Each Brigade will include two tank battalions (on 53 "Leopard 2" tanks), two mechanized battalions (on 31 "Marder A3"), one self-propelled artillery group (on 16 155mm "M109" self propelled vehicles) and the customary supports.

Another 6 Brigades (called B1) will be of a kind which could be defined "heavy mechanized".

Their personnel is virtually identical to that of armoured Brigades, but tanks, of the "Leopard A5/A6 type, will be employed differently; they will be decentralized to the mechanized battalions for a more efficacious antitank action.

The artillery group too will be less powerful: instead of 16 it will only have 10 self-propelled 155mm howitzers.

Another 6 Brigades (type B2) could be considered "light mechanized"; these will differ from the previous ones in the tank battalions which will have only 40 means

Up to the end of the 90s the "BO-105 P" helicopter will be the means of the antitank helicopter squads of the air-mechanized Brigades.





(instead of 53) of the oldest series of "leopard 1"; their operational function will, however, remain unchanged.

In both Brigades the following must be noticed:

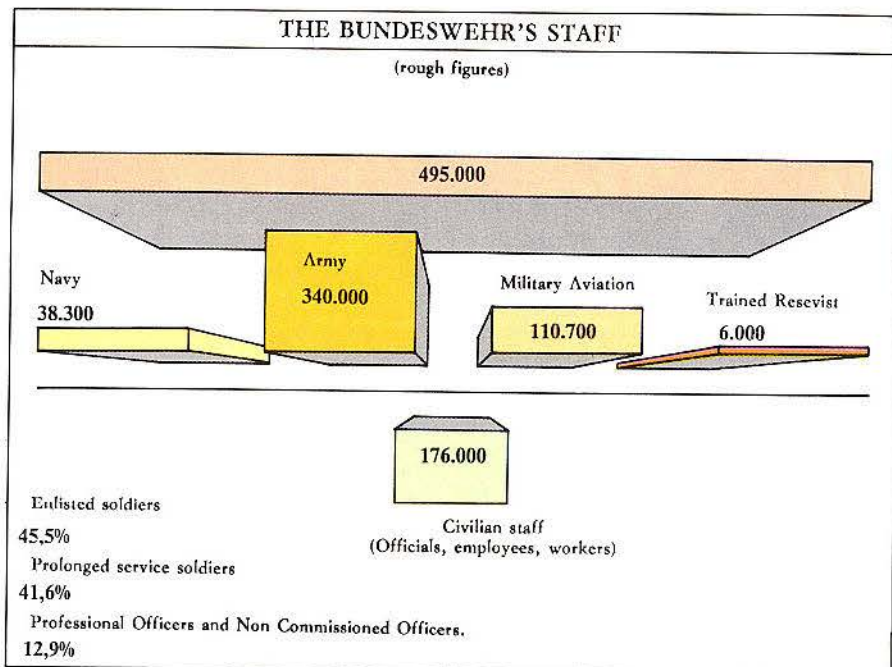
- mechanized soldiers will be designed to fight mainly on foot;
- tanks will be considerably increased, from 61 of "Structure 4" to 106 in the B1 type Brigades and 80 in the B2 type.

Five mechanized Brigades and the mountain Brigade will undergo more substantial changes in the type and number of battalions forming it. These changes are designed to improve their employment on terrains suitable for a type of defence which could be defined — according to doctrinal regulations of the series 800 — "anchored". In fact these will be the most consistent Brigades of the Army "2000" as they are based on 4 mechanized battalions (each supplied with a tank company), 1/pionier engineer battalion, 1 artillery group on 16 155mm (4) self-propelled tanks and the customary supports.

The two security Brigades will be virtually the same, as regards their organization, as those of the present Territorial Army and will be formed by Jägers (riflemen). They may be considered light Infantry, but the present light tanks, supplied to the squads, will be replaced by "M113".

They are designed to be employed to protect the communication lines of the Army Corps and the security of sensitive areas and points. The composition of the two Brigades has not yet been decided, but it is likely that the number of battalion sized units (nowadays 4-5) may be increased to 5-6 and the entity of the tank component has not yet been defined.

The 2 parachutist Brigades and



the 2 air-mechanized brigades will form 2 airtroop Divisions headed by the 1 and 11 Army Corps while the 111 Army Corps will have a mixed Brigade (a parachutist regiment and a helicopter regiment).

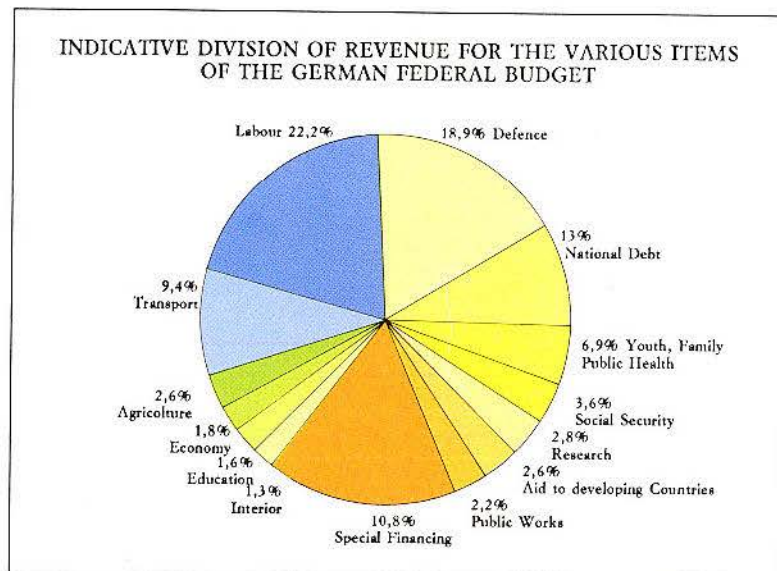
Each parachutist Brigade will have 4 battalions with differentiated personnel. Two will be parachutist battalions with the same features as the light Infantry battalion and two will be more markedly antitank. They will be supplied with "Milan" and "TOW 1" antitank missiles and with a 30mm support weapon newly conceived.

The "Kraka" wheeled vehicles will be replaced in 1990 with "Wiesel" light tracked vehicles (60

for each battalion) which will allow a greater protection of the crew and the workability of the arms systems from aboard.

As today, support fire will be supplied by 16 120mm mortars grouped in a Brigade sized company.

The real novelty of the new structure, however, is the airmechanized Brigade which will initially contain two squadron groups with about 40 "BO-105" helicopters with "TOW" missiles and by the end of the 90s the "PAH-2" antitank helicopters, consequence of the ambitious Franco-German project for the creation of a new vehicle, more advanced than the "Mangusta" and in competition with the future



"Tonal", equipped with new generation missiles.

Each antitank helicopter squadron group will be supplied with recce helicopters in the ratio of 1 to 7 as regards antitank helicopters.

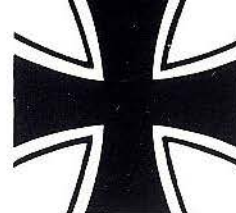
Besides the two fighting squadron groups, the Brigade will also be supplied with a transport helicopter component in support of operations of the parachutist Brigade as well as a technical unit.

The two Divisions and the mixed Brigade thus organized are a novelty and will grant the German Army new operational opportunities which will allow Army Corps Commanders

ject to further important changes.

Artillery units in particular underwent in 1985 a deep reorganization with variations in the staff and a standardization of materials which also considered the introduction of new materials such as the MLRS.

An increasing attention is paid to all that regards command and control. Commanding and communication units will be unified in battalion sized units in view of a better integration between the two components which are the basis for an efficient command activity. In practice, the entire performance of combat-exploration-fire will be en-



talion and a medical unit will continue to ensure logistic support.

Means and materials

The federal Army is characterized by a large availability of means and by the constant modernization to which such means are subject. Moreover, no sector is neglected or left with outdated materials. Rotation of means occurs steadily and renewal is carried out according to a cadenced and respected schedule.

The new means of «Structure 2000» are the result of the technical bodies' steady research.

In the supply programmes of the Army of the 90s and early 2000 there are interesting novelties regarding antitank and helicopter combat.

The novelty in the ground performed antitank combat is the armoured vehicle "Panther". It is the result of the work of an association of four important industries and seems the only true novelty in the field of armoured vehicles of the German Army.

This vehicle, formed by an armoured platform with a jointed arm which may be hydraulically raised upto 12 m, combines old and new requirements. The old ones regarding antitank combat and the new regarding antihelicopter combat.

In fact, third generation missiles are installed on the mobile arm. The range of these missiles reaches 4,500 m and they are equipped with a fire and forget guiding system, capable of carrying out antitank and antihelicopter activity.

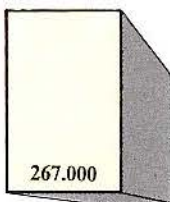
The action of the "Panther" which will be supplied to the antitank companies of mechanized and armoured Brigades will be integrated with that of the tank which will continue to be the "Leopard 2".

While the tank carries out its action, under conditions of visibility supplied by the German plain, be-

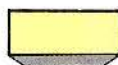
ARMY STAFF

The Army is the most staffed Armed Force of the Bundeswehr and makes for about 70% of the entire staff. It numbers a total of 340,000 men.

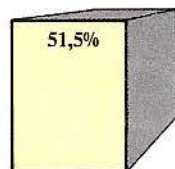
Field Army



Territorial Army



Bodies of Army Central Office



Enlisted soldiers



Prolonged service soldiers



Professional Soldiers

to have a versatile and flexible instrument capable of facing critical situations and preparing the path for in-depth counterattacks which continue to be one of the conceptual strongholds of the employment doctrines of the Bundeswehr.

To conclude this panoramic view on the organizational novelties resulting from the adoption of «Structure 2000» mention must be made of the tactical support of Army Corps and Divisions.

The present artillery and engineering support units have already reached the highest capacity in "Structure 4" and will not be sub-

tirely reorganized.

In this framework a "Drone" Army Corps sized combat unit will be established. This will respond to the demands stemmed during the doctrinal debate on FOFA (Follow on Forces Attack) and on the opportunities of contrasting it.

As regards the Division there are no important novelties: as today, supports will be formed by a commanding and communication unit, an artillery regiment, an anti-air artillery regiment, an exploring battalion and a pioneer engineering battalion.

A supply battalion, a repair bat-



ventional combat and that the German Army has no intention of replacing the "Leopard 2", in the medium run at least, shows the confidence placed in this particular model.

A further effort will be made to renew the combat and transport vehicle line still based on the "Marder".

As regards arms systems for the fire support, two industries are working on a tracked self-propelled vehicle to replace the failed "SP-70" and the construction of a combat "Drone" is being surveyed.

The other means and materials protract their validity well further than the 90s and for the time being there is no plan to modify them.

Separate mention must be made of command and control for which high investments are foreseen for the coming years.

Battlefield surveillance is carried out with a series of radar systems and with "Drones 89" already on stock to which the "Drones 289" are gradually being added.

The chain of surveillance systems is lacking a mini RPV for which experiments are being carried out though there is yet no precise orientation.

The command and control system

for the antitank defence is entirely defined and the two kinds of radar considered are being supplied as is the hardware and software involved.

The "Heros 3" system to carry out command and control by the general Staff of Army Corps and Division is also already defined and, starting the coming year, it will be supplied to the Superior Units concerned.

In sum, a positive outlook without dark areas.

CONCLUSIONS

The "breezes of peace" which for the first time blow from East to West have had an immediate effect. Most Europeans hope they are not passing breezes and we all hope that in the near future the money destined to the Armed Forces will be

tween 800 and 1800 m the "Panther" will be employed between 1800 and 4500 metres.

Defence will thus balance the action of enemy antitank helicopters by means of a simple though efficacious ground vehicle capable of opposing attack helicopters and intervene against enemy tanks before the latter can employ the equipment on board.

The other novelty will be the Franco-German "PAH-2" antitank helicopter. It stems from the political will of the two Governments, but it will not come to light before the late 90s.

Its characteristics will not be much different from those of American, Russian and Italian helicopters already employed, but its transport capacity and manegeability will be different.

The fact that the two most important novelties among the Bundeswehr's materials are the "Panther" and the "PAH-2" proves that the tank is and will always be the leading feature of modern con-

Below left

A Panzergrenadier, an armoured grenadier of the Federal Army.

Below

The mountain Brigade, placed within a mechanized Division will continue to be an interesting point of reference for the entire Federal Army.



less and less and peace more and more consolidated.

Federal Germany does not escape this logic, even though its front line position does not allow it to lower the guard too hastily. The "breezes of peace" are enough, however, to convince the experts to re-examine, though marginally, the employment doctrine, the structure of the Armed Forces and expenses to destine to Defence. The doctrine reevaluates the terrain as an incrementing factor of defence and grants credit to mechanized infantry forces and pioneer engineering for the defence of positions.

It also enhances extremely mobile forces such as airborne and helicopter units, as absolutely necessary elements for strength and surprise actions or to close up eventual breeches in the defensive organization.

In future the structure of forces will be characterized by a lesser

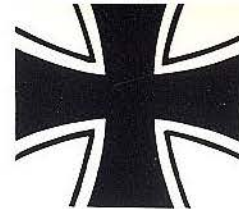
defensive capacity and will greatly depend on reserves and mobilization as the Superior Units will be understaffed.

Even today the budget is gradually, but steadily decreasing. Therefore, the sub-division of funds will have to be re-examined since greater resources will have to be destined to the training of reservists and less will be devoted to investments on new materials.

The Bundeswehr's «Structure 2000» is already considering all this and is trying to balance the demands for efficiency and those imposed by the circumstances that ask for a revision of the military instrument.

There have been, however, discussion and polemics and opinions offered by the majority and the opposition have appeared on all organs of information. Some believe that too much has been reduced and others state that enough has been sacrificed.

The fact remains that the Federal Army has, with great attention and preparedness, made the necessary steps to adapt to future foreseeable events, not expecting to be strengthened by such a reorganization, but certainly more fit for the evolving reality of the modern world. It is likely that such steps will soon



have to be taken by many other countries of the West and perhaps also of the East.

Col. Carlo Cabigiosu

NOTES

(1) The Territorial Army acts as go-between for the national military organization, the NATO organization and the civil administration of the State and is supplied with a few units (nowadays Brigades and Regiments) for the defence of the territory.

(2) The remaining 48.59 is formed by 38.4% Soldaten auf Zeit (Officers, NCOs and soldiers on prolonged services) and by 10.1% Berufssoldaten (professional Officers and NCOs).

Of the above mentioned 340 men of the Army, 267,000 make up the Field Army, 48,000 the Territorial Army and 25,000 work within the so-called Central Office of the Army which includes study, school and training bodies.

(3) It is advanced that a tank battalion for each armoured Brigade and two mechanized battalions for each mechanized Brigade may become "cadres". The existing battalions will be equaled to the "cadre" ones and will have a 15-20% Officers and Non Commissioned Officers more to form the first mobilized unit group.

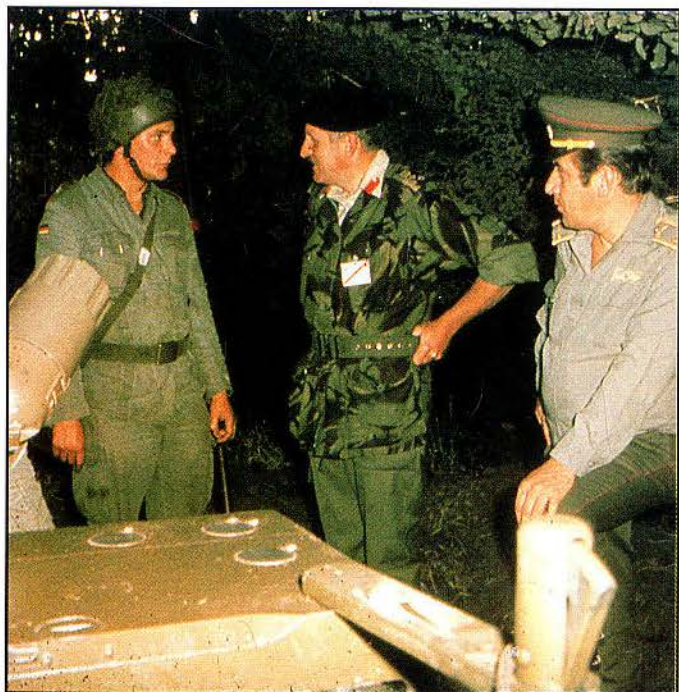
(4) The Franco-German mixed Brigade, not assigned to NATO, will be similarly staffed.

Below

Soviet observers at a NATO exercise in Germany.

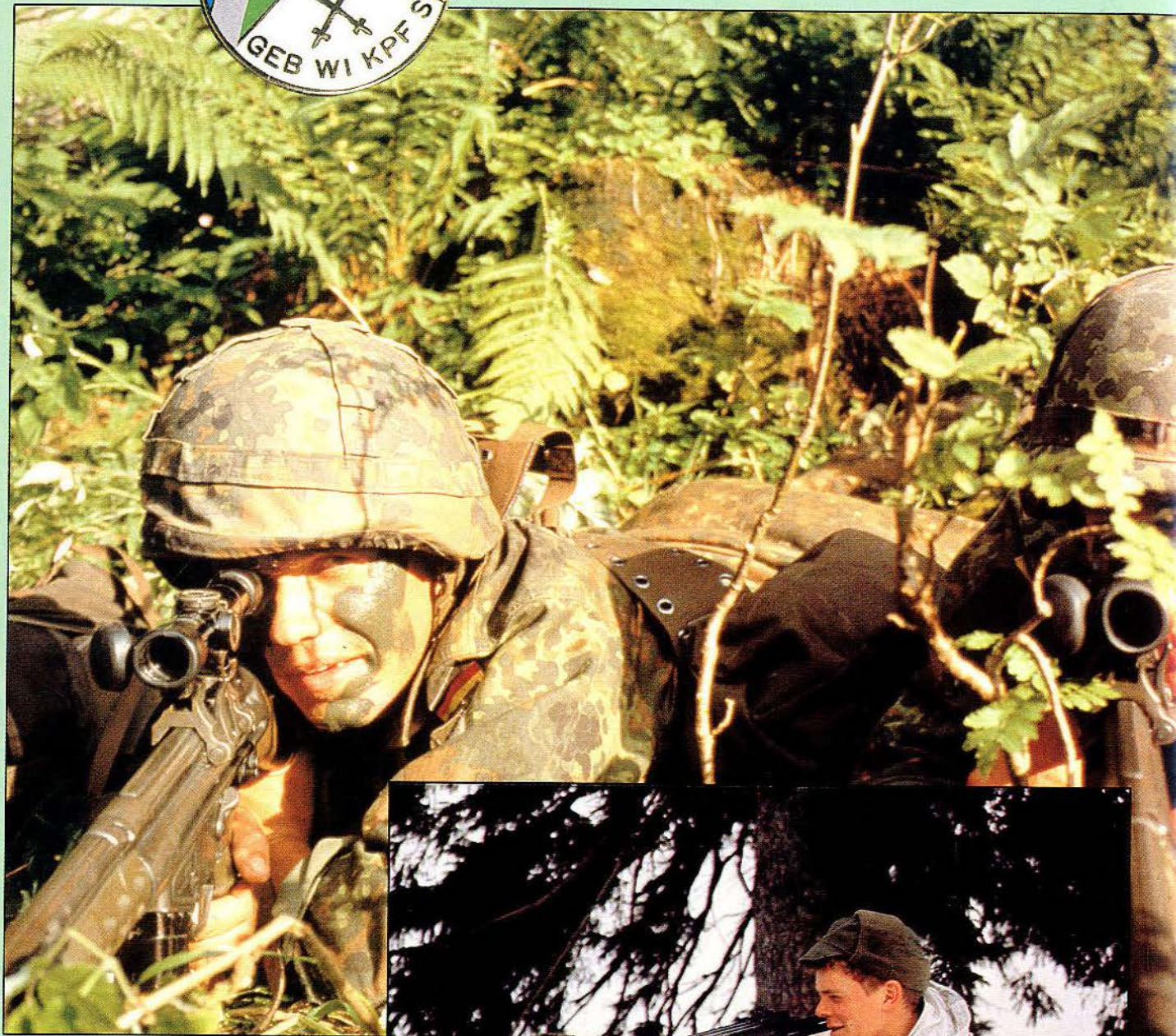
Below right

The Jägers, Infantry speciality, will be tasked with the defence of the communication zone.



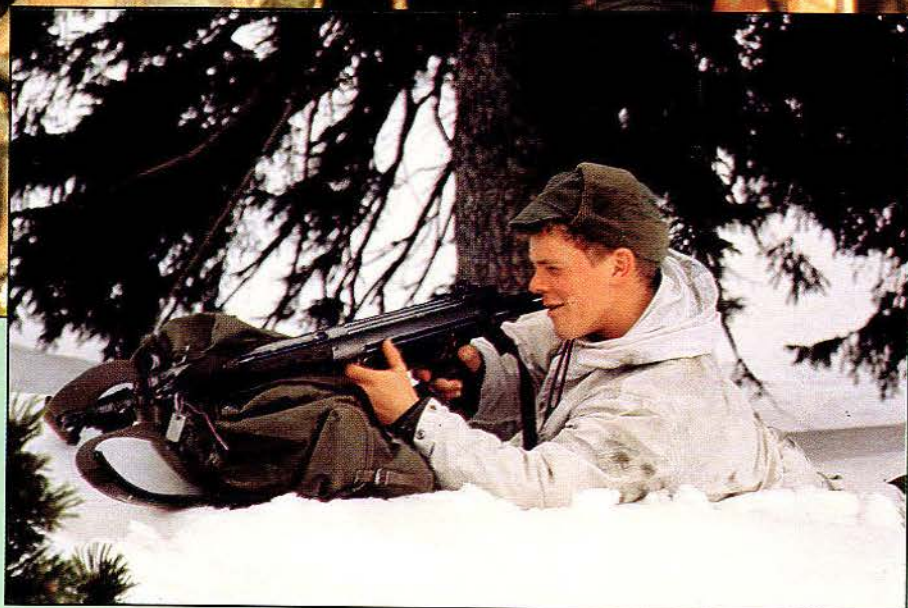


The badge of the Gebrings-und-Winterkampfschule



Above
German mountain soldiers with the new camouflage smock and the new helmet been tested at present.

Right
A member of a Hochgebirgszug in action: The rifle is fixed to the knapsack.



GEBIRGS UND WINTERKAMPF SCHULE



Of the five Alpine nations, Austria, France, Italy, Switzerland and Federal Germany, the latter is most certainly the one with the lowest portion of mountainous territory in proportion to the extension of the country. Moreover, from a military point of view, the Alpine boundary separates Germany from two neutral nations, Austria and Switzerland. In spite of this even Germany admits the importance of keeping up a group, though limited in number, of Alpine troops specialized in mountain combat and consequently trained and equipped, heirs of the tradition of the Gebirgstruppe established during the First World War.

In an army of conscripts most of the training cycle is carried out within the employment unit. This also holds true for the Gebirgsjäger, the German Alpine troops serving in the 23 Mountain Infantry Brigade, the sole unit really specialized in altitude combat belonging to the 1st Mountain Division, since the other divisional units are an armoured and a mechanized Brigade. However, to train conscripts and lead them in the typical alpine scenery special Cadres must be established and it is necessary to study the development of combat tactics according to the technological progress connected to arms and transport systems as well as the aspect regarding personal equipment. Upto the beginning of World War II, the German army did not have a training centre for mountain combat. In Mittenwald, now headquarters of the school, a mountain training range was established in 1936, followed in 1939 by the first true high mountain school, the Heeres-Hochgebirgsschule with headquarters in Fulpmes, in Tyrol. Following decisions taken during the Paris Conference of 20-22 October, 1954, the occupation regime in Germany ended, but in De-

cember of the following year the Soviet Union, which had not taken part in the previous meeting, signed with Pankow the treaty which made a separate state of the Soviet area of occupation. The above and the invitation sent to Germany by the three Western powers, France, great Britain and the United States, to join the Atlantic Alliance, led to the establishment of the Bundeswehr. The first trace of an alpine school is found on the plain, in Hammelburg, where within the Infantry School the Heeresschule Gebirgs-und-Winterkampf is established on 1 July, 1956. A month later it is definitely called Gebirgs-und-Winterkampfschule.

It is back in the mountains once more and on 1 September, 1956 it is moved to Mittenwald where it still is nowadays.

The school headquarters in the Luttensee Kaserne which takes the name of the Luttensee lake, a few kilometres north-west of the tourist resort on the boundaries of Austria. The location of the school in Mittenwald is due to a well-defined reason: the surrounding area is a mountain climber's paradise.

From the windows of the school's headquarters we may see on the east the Karwen-



Non commissioned cadets listen to the briefing of a non commissioned instructor before an exercise.



Left

The Headquarters of the German Mountain school in Mittenwald.

Below

On the left pocket of this non commissioned officer of a mountain battalion we see the oval with the edelweiss of his military mountain guide licence.

Right

A squad of German mountain climbers during a winter exercise.

del mountains with peaks of 2,30 - 2,500 meters, while at the back we see the Wetterstein mountains, towards the east-west, with the Zugspitze, 2,963 metres, the highest peak in Germany. Both these group of mountains are used as mounting climbing training areas, but are not used for tactical exercises for ecologic reasons and limitations of a naturalistic kind. For tactical training the school has a firing range for low level activity, whereas for more complex activity the typical training area is that of the so-called Mittelgebirge, a plateau which reaches 2,000 metres and is a few kilometres north of the school and has a remarkable extension.

THE SCHOOL.

The Gebirgs-und-Winterkampfschule depends on the Heeresamt, responsible for materials and training of the German Army, and more precisely on the 5th Division, responsible for the training of fighting troops. In fact, the two fighting schools, the already mentioned KTS1 in Hammelburg (Infantry) and the KTS2 in Munster (armoured) depend on the same Division like the Schongau parachutist school and the mythical long range international patrol school in Weingarten.

The Luttense Kaserne was built in 1934 by a Munich school as a holiday and study resort for its students. An economic crisis befell the school and the buildings were bought, while still under construction, by the military administration and since 1935 the barracks have been the headquarters of military units, the Wernacht first, then allied and finally Bundeswehr, with a break from 1946 to 1956, during which they put up certain bodies of the UNNRA international organization, a sanatorium and lastly the skiing and mountain climbing school of the Ger-

man frontier guards, the Bundesgrenzschutz.

As already mentioned the consistency of the German Alpine troops proper is limited to a Brigade, four Infantry battalions, one of which designed to become cadre, an artillery group and, in the near future, a tank battalion, besides support units.

The personnel and potentialities of the school are thus in line with the requirements of the units. Present personnel amounts to 16 officers, 30 non commissioned officers and eight enlisted men together with 39 civilians, while the highest number of men attending the school is 136. The low number of soldiers is due to the fact that many logistic tasks are entrusted to civilians, while guards are performed by personnel belonging to the two Alpine battalions of the 23 Brigade located in Mittenwald, the 233rd and the 234th. The organization is very simple: The command, employing 6 officers, 15 non commissioned officers and all the soldiers as well as almost all the civilians, has a personnel/information section, a training section, by far the most numerous, a logistic, sanitary, administrative section, wholly managed by civilians and a didactic documentation section, most important in a

taining vocation organization. With a very limited number of personnel, three officers and one commissioned officer, the research and study centre is of the utmost importance not only for the school, but for the mountain troops as a whole and for the very German Army as we shall further see.

The training soul of the school is formed by the "inspektion", the instruction company, divided into a command, an instructors' section, four sections for the specialization courses and a platoon of the non commissioned officers cadet course.

COURSES

The mountain climbing and skiing training does not concern only the Gebirgsjäger; in fact, many ground units of the Bundeswehr send their men to Mittenwald to be trained in the various techniques. However, the main course of the school is that for the Heeresbergführer, the military mountain guides.

Personnel destined to specialize in mountain activities consists mainly of non commissioned officers, though some officers also attend the course. Training lasts eight months, four during the winter and four during the summer and includes the theoretic and practical study of mountain climbing and skiing techniques, first aid, rescuing, theory on the conditions of the snow and the prevention of avalanches, in fact everything needed to be able to work safely in the high mountains, under any circumstance, at the head of a unit. It must be mentioned that due to the almost total absence of perennial glaciers in the German Alps (two limited size glaciers may be seen on the peak of the above mentioned Zugspitze) the course moves for a few weeks to Chamonix, at the Ecole Militaire de haute Montagne dell'Armée de Terre to train on the Mer de Glace.

At the end of the course the Heeresbergführer return to their units. Each Infantry battalion of the Gebirgsjägerbrigade 23 has 21 mountain guides employed at the Command and at the various companies and, in particular, in the specialized high mountain platoon, one for each battalion, known as the Hochgebirgszug, in which the platoon and team commanders have a mountain guide licence. The oval badge with the edelweiss and the crossed ice axes is not assigned





for life: in fact, every two years a verification course must be followed if one wants to keep the qualification: the course is held in the school, in two different stages, one during the summer and one during the winter. The importance of the course for the mountain guides is underlined by the fact that the head of mountain guide course instructors has a higher rank than the commander of the instruction company.

The Heeresbergführers are not employed exclusively within the mountain Infantry Brigade; we may find them also in the other units of the 1 Mountain Division, though in smaller number.

Another important course is the one for officers destined to the units of the Division.

In fact, before attending the officers' school, these cadets spend three months in Mittenwald where they attend a first mountain training course and once the officer training is over they return to the school for a two months' course centred on mountain fighting tactics.

After serving the units as file men, the cadet on commissioned officers of the units of the Division qualify for the rank of non commissioned officer by following a three months' course at the school where from a tactical point of view the most important teaching is the one that qualifies them to command a squad. During his career, a non commissioned officer will often return to the school for further courses.



Below

Soldiers of a high mountain platoon of a battalion getting ready to build an igloo.



He will most probably follow the three weeks' mountain fighting tactical course and that for mountain rescuing, sub-divided into a two week winter stage and a three week summer stage. Most of the Division's personnel attends the latter.

The Edelweiss Division men are not the only ones attending the Luttensee Kaserne: many units send their own Cadres to attend the military skiing course, since snow is the mutual element of all Germany and not of its mountain territory. In Mittenwald therefore one may quite easily find officers of the various Arms who attend the course for military skiing instructors which lasts three weeks; generally these people are already trained in military skiing and on going back to their unit they will be able to train enlisted personnel. Moreover, the boundary with Czechoslovakia is formed by low mountains and high hills to the south and is similar to the Mittelgebirge where most of the tactical training is carried out. Often therefore, the units destined to intervene in that area, mostly headed by the Mountain Division, are trained on the mountains north of Mittenwald, and it is not by chance alone that the reconnaissance battalion of the Division is located in Freyung, a few kilometres from where Federal Germany, Austria and Czechoslovakia join together. Foreign units, especially Belgian, British, Dutch and American, join the national attendants at the school and the crests that decorate the stairway of the Inspektion headquarters, for the most part a gift of units of the special forces, are a witness to this.



Students of the school during an exercise armed with a "G-3" rifle and the 40mm grenadelauncher: the school has the task of testing arms systems in a cold environment.

THE RESEARCH AND STUDY CENTRE

The Centre's first task is the drafting of the series of doctrinal manuals titled "Mountain Fighting". The editions at present being used are rather old, but during this year new manuals will be published describing the operational procedures at battalion, company and platoon level; the reasons for examining tactics upto platoon level is the consideration, common to mountain troops of many countries, that the division of the terrain causes reduced groups to operate autonomously. Besides manuals devoted to Division personnel, of the Brigade 23 especially, the centre is also revising two manuals dedicated to a vaster public, entitled respectively "Combat on skis" and "The Soldier in Winter".

The two manuals deal with military mountain climbing the first and mountain rescue the second. Moreover the centre has been asked to study the new concept of employment for German mountain troops, whose secondary role is to operate as light Infantry in the Bavarian plains and has had its part in the definition of the new organization of the mountain Infantry Brigade which is about to get the reinforcement of a tank battalion and is to replace part of the vehicles with armoured transport vehicles "Fuchs". This project is slightly belated due to the precedence given to the Franco-German Brigade.

The second field in which the centre's reduced staff operates is that regarding the evaluation of materials. At present the Bundeswehr is testing a new series of uniforms and accoutrements; Goretex found its first applications in mountain troop gloves and was later used for the internal layers of heavy coats and trousers, shoes and gaiters. The clothing being tested is a "system of clothing" consisting in several layers which allows to adapt the clothing to the climate and the work to be performed. The new camouflage smock will be completed by a splinter proof jacket in a spotted camouflage material which should replace the grey-green uniform of the camouflage smock used at present. Moreover, the German Army is testing in all the units a series of equipment which goes from the one-man tent to the mess-tins and

rations and the school is obviously an important point of reference and the school is obviously an important point of reference since it can test materials in extreme conditions; the aim of these changes is to reach greater comfort, better protection and have less weight to transport.

The school has recently been asked to test the new revolutionary gun "G-11" by Heckler and Koch which fires ammunition from 4.7mm without cartridge case which as regards the total weight weapon-ammunition of the "G-3" at present employed (weapon + 100 shots 7.62mm = 7.35 kg) will allow the soldier to carry 614 shots or reduce the weight transported. Tests carried out at the school proved very satisfactory; the plastic material from which the weapon is made is very appreciated by those operating at temperatures well below zero. The skin sticking to the metallic parts is no longer a problem, especially that of the hand during the daily maintenance and that of the cheeks during firing. Despite the trigger guard be-

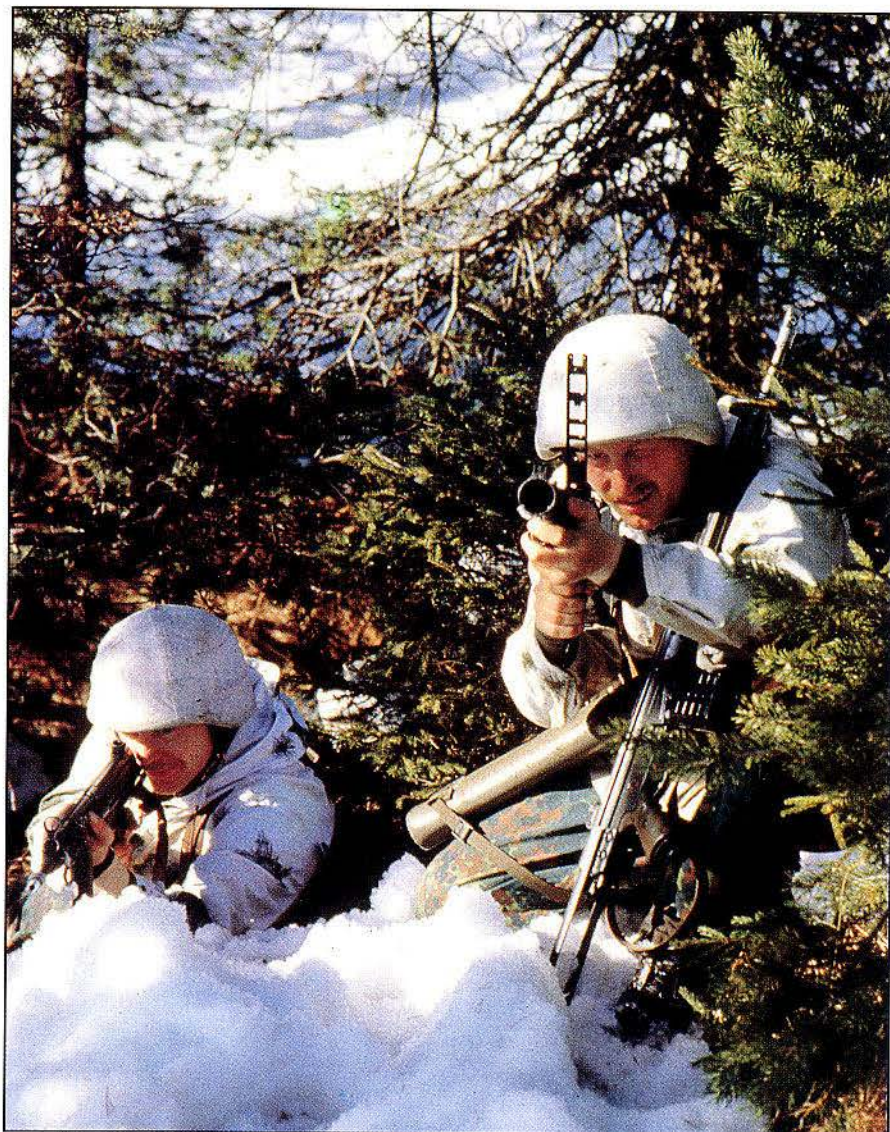
ing fixed there have been no inconveniences during firing with gloves and only minor changes have been suggested.

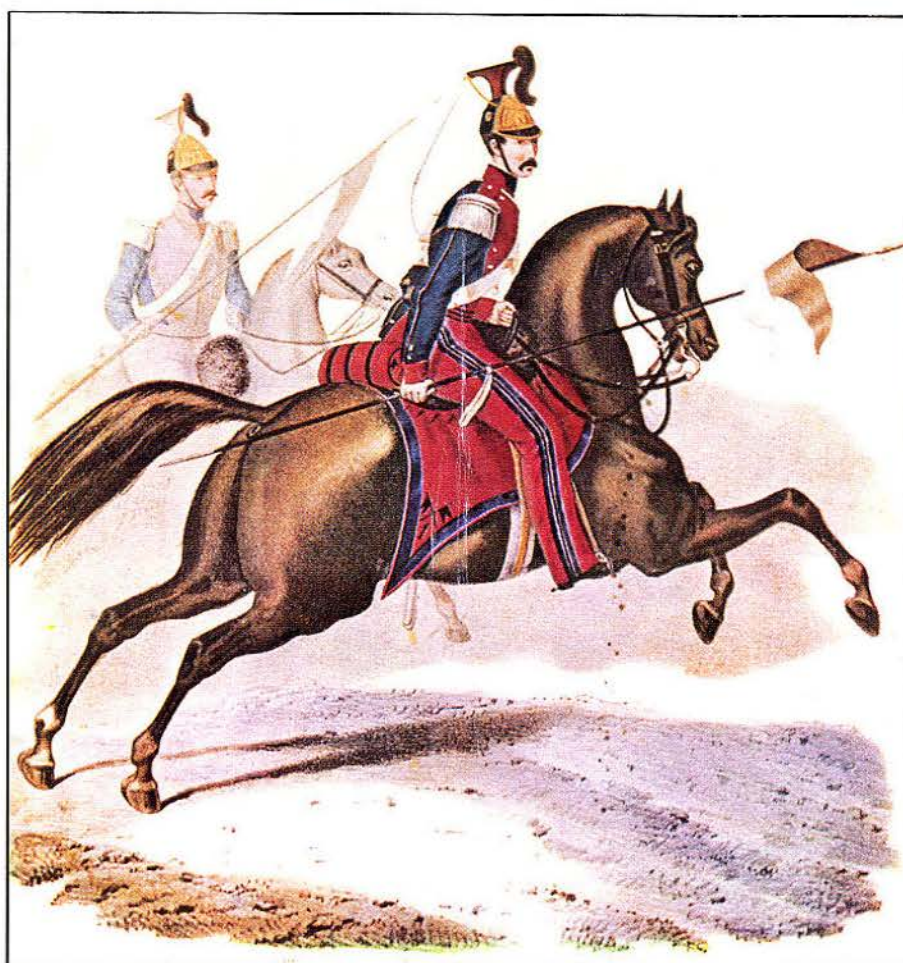
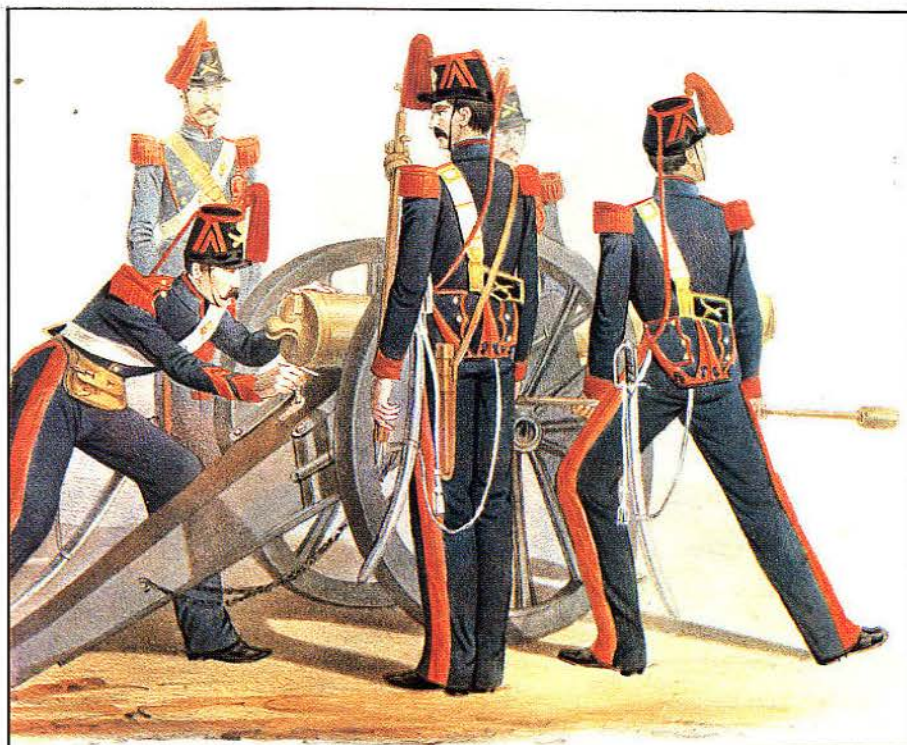
Moreover, the centre is responsible for the choice of specialist material regarding the skiing kit, bindings, seal skins, climbing material, rescuing systems.

Obviously the best material, all of industrial origin, is distributed to the mountain troops while the plain units which may have to work on snow are equipped with older material since they have to move on minor slopes.

Though small and with a reduced staff the Gebirgs- und Winterkampfschule in Mittenwald carries out its task of training the Cadres destined to wear the beret with the edelweiss, symbol which distinguishes the German mountain units and the Army Cadres which will somehow have to operate in a mountain environment or under winter conditions.

Paolo Valpolini





FRANCE AT WAR

BATTLE SPECTACLE AND A REVIEW



Travelling with two chauffeurs is not the luxury it looks; since there is only one of you, and there is always another of those iron men to relieve the wheel. Nor can I decide whether an ex-professor of the German tongue, or an ex-road-racer who has lived six years abroad, or a Maréchal des Logis, or a Brigadier makes the most thrusting driver through three mile stretches of military traffic, repeated at half hour intervals. Sometimes it was motor ambulances strung all along a level; or supply; or those eternal big guns coming round corners with trees chained on their long backs to puzzle aeroplanes, and their leafy, big-shell limbers snorting behind them. In the rare breathing spaces men with rollers and road metal attacked the road. In peace the roads of France, thanks to the Motor, were none too good. In war they stand the incessant traffic far better than they did with the tourist. My impression — after some 700 miles printed off on me at between sixty and seventy kilometres — was of uniform excellence. Nor did I come upon any smashes or breakdowns in that distance, and they were certainly trying them hard. Nor, which is the greater marvel, did we kill anybody; though we did miracles down the streets to avoid babes, kittens, and chickens. The land is used to every detail of war, and to its grime and horror and makeshifts, but also to war's unbounded courtesy, kindness, and long-suffering, and the gaiety that comes, thank God, to balance overwhelming material loss.

A VILLAGE SKETCH

There was a village that had been stamped flat, till it looked older than Pompeii. There were not three roofs left, nor whole house. In most places you saw straight into the cellars. The hops were ripe in the dotted fields round about. They had been brought in and piled in the nearest outline of a dwelling. Women sat on chairs on the pavement, picking the good smelling bundles.

When they had finished one, they reached back and pulled out another through the window hole behind had to be manœuvred out of what had been a farmyard, to take the hops to market. A thick, broad, fair haired wench, of the sort that Millet drew, flung all her weight on a spoke and brought the cart forward into the street. Then she shook herself, and, hands on hips, danced a little defiant jig in her sabots as she went back to get the horse.

Another girl came across a bridge. She was precisely of the opposite type, slender, creamy-skinned, and delicate featured. She carried a brand new broom over her shoulder through that desolation,

and bore herself with the pride and grace of Queen Iseult. The farm girl came out leading the horse, and as the two young things passed they nodded and smiled at each other, with the delicate tangle of the hop vines at their feet.

The guns spoke earnestly in the north. That was the Argonne, where the Crown Prince was busily getting rid of a few thousands of his father's faithful subjects in order to secure himself the reversion of his father's throne. No man likes losing his job, and when at long last the inner history of this war comes to be written, we may find that the people we mistook for principals and prime agents were only average incompetents moving all hell to avoid dismissal. (For it is absolutely true that when a man sells his soul to the devil he does it for the price of half nothing).

WATCHING THE GUN-FIRE

It must have been a hot fight. A village, wrecked as is usual along this line, opened on it from a hillside that overlooked an Italian landscape of carefully drawn hills studded with small villages — a plain with a road and a river in the foreground, and an all revealing afternoon light upon everything.

The hills smoked and shook and belowed. An observation balloon climbed up to see; while an aeroplane which had nothing to do with the strife, but was merely training a beginner, ducked and swooped on the edge of the Plain. Two rose pink pillars of crumpled masonry, guarding some carefully trimmed evergreens on a lawn half buried in rubbish, represented an hotel where the Crown Prince had once stayed. All up the hillside to our right the foundations of houses lay out, like a bit of tripe, with the sunshine in their square hollows.

Suddenly a band began to play up the hill among some trees; and an officer of local Guards in the new steel anti-shrapnel helmet, which is like the seventeenth-century sallet, suggested that we should climb and get a better view. He was a kindly man, and in speaking English had discovered (as I do when speaking French) that it is simpler to stick to one gender. His choice was the feminine, and the Boche described as "she" throughout made me think better of myself, which is the essence of friendship. We climbed a flight of old stone steps, for generations the playground of little children, and found a ruined church, and a battalion in billets, recreating themselves with excellent music and a little horseplay on the outer edge of the crowd. The trouble in the hills was none of their business for that day.

Still higher up, on a narrow path among the trees, stood a priest and three or four officers.

They watched the battle, and claimed the great bursts of smoke for one side or the other, at the same time as they kept an eye on the flickering aeroplane. "Ours", they said, half under their breath. "Theirs". "No, not ours that one — theirs! ... That fool is banking too steep... That's Boche sharpnel. They always burst is high. That's our big gun behind that ountier hill... He'll drop his machine in the street if he doesn't take care... There goes a trench-sweeper. Those last two were theirs, but that' — it was a full roar — "was ours".

BEHIND THE GERMAN LINES

The valley held and increased the sounds till they seemed to hit our hillside like a sea.

A change of light showed a village exquisitely pencilled atop of a hill, with reddish haze at its feet.

"What is that place?" I asked.

The priest replied in a voice as deep as an organ: "That is Saint. It is in the Boche lines. Its condition is pitiable".

The thunders and the smokes rolled up and diminished and renewed themselves, but the small children romped up and down the old stone steps; the beginner's aeroplane unsteadily chased its own shadow over the fields; and the soldiers in billet asked the band for their favourite tunes.

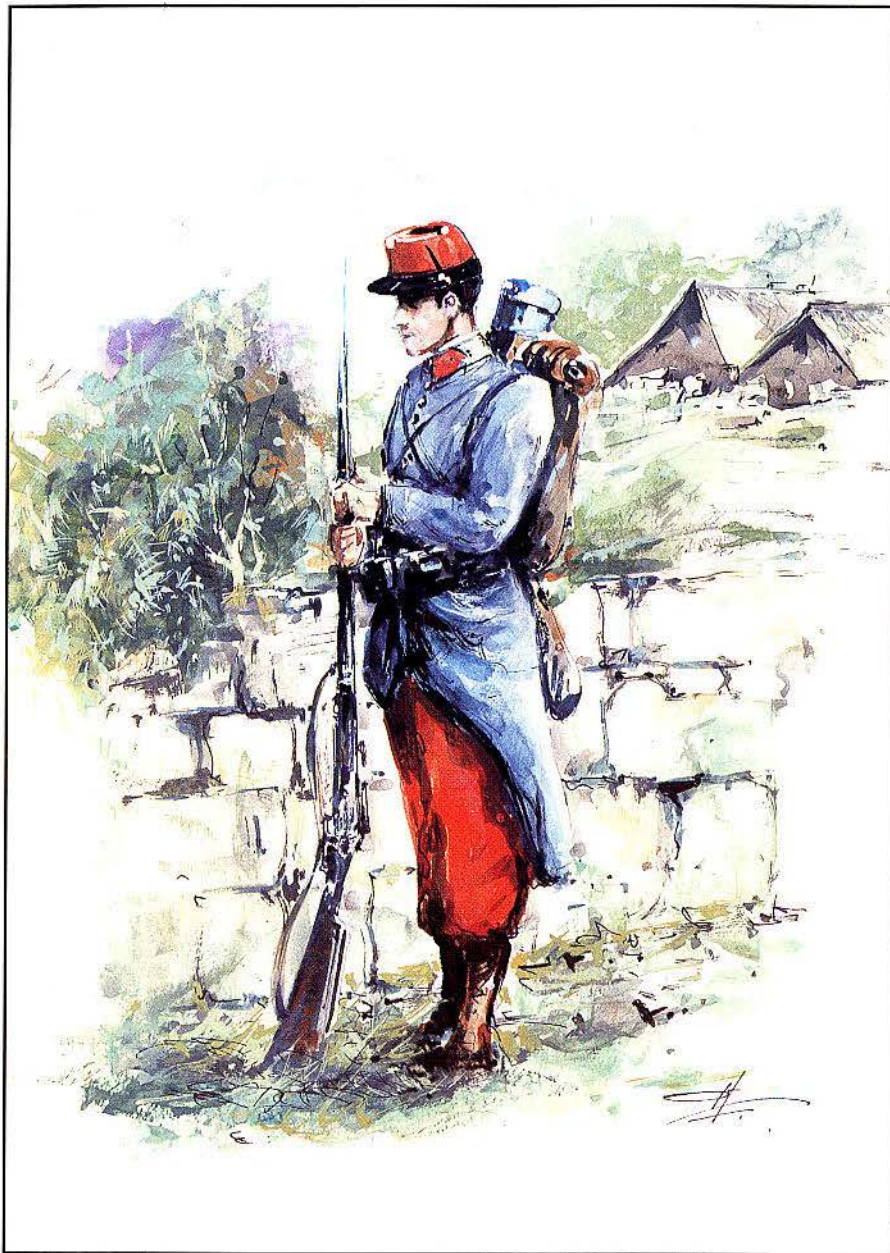
Said the lieutenant of local Guards as the cars went on: "She — play — Tipperary".

And she did — to an accompaniment of heavy pieces in the hills, which followed us into a town all ringed with enormous searchlights, French and Boche together, scowling at each other beneath the stars. It happened about that time that Lord Kitchener with General Joffre reviewed a French Army Corps.

We came on it in a vast dip of ground under grey clouds, as one comes suddenly on water; for it lay out in misty blue lakes of men mixed with darker patches, like osiers and undergrowth, of guns, horses, and wagons. A straight road cut the landscape in two along its murmuring front.

VETERANS OF THE WAR

It was though Cadmus had sown the dragon's teeth, not in orderly furrows but broadcast, till, horrified by what arose, he had emptied out the whole bag and fled. But these were no new warriors. The record of their mere pitched battles would have satiated a Napoleon. Their regiments and batteries had learnt to achieve the impossible as a matter of routine, and in



twelve months they had scarcely for a week lost direct contact with death. We went down the line and looked into the eyes of those men with the used bayonets and rifles; the packs that could almost stow themselves on the shoulders that would be strange without them; at the splashed guns on their repaired wheels, and the easy working limbers.

One could feel the strength and power of the mass as one feels the flush of heat from off a sunbaked wall. When the Generals' cars arrived there, there was no loud word or galloping about.

The lakes of men gathered into straight-edged battalions; the batteries aligned a little; a squadron reined back or spurred up; but it was all as swiftly smooth as the certainty with which a man used to the pistol draws and levels it at the required moment.

A few peasant women saw the Generals alight. The aeroplanes, which had been skimming low as swallows along the front of the line (theirs must have been a superb view) ascended leisurely, and "waited on" like hawks. Then followed the inspection, and one saw the two figures, tall and short, growing smaller side by side along the white road, till far off among the cavalry they entered their cars again, and moved along the horizon to another rise of grey-green plain.

"The army will move across where you are standing. Get to a flank", some one said.

AN ARMY IN MOTION

We were no more than well clear of that immobile host when it all surged for-

ward, headed by massed bands playing a tune that sounded like the very pulse of France.

The two Generals, with their Staff, and the French Minister for War, were on foot near a patch of very green lucerne. They made about twenty figures in all. The cars were little grey blocks against the grey skyline. There was nothing else in all that great plain except the army; no sound but the changing notes of the aeroplanes and the blunted impression, rather than noise, of feet of men on soft ground. They came over a slight ridge, so that one saw the curve of it first furred, then grassed, with the tips of bayonets, which immediately grew to full height, and then, beneath them, poured the wonderful infantry. The speed, the thrust, the drive of that broad blue mass was like a tide-race up an arm of the sea: and how such speed could go with such weight, and how such weight could be in itself so absolutely under control, filled one with terror. All the while, the band, on a far headland, was telling them and telling them (as if they did not know!) of the passion and gaiety and high heart of their own land in the speech that only they could fully understand. (To hear the music of a country is like hearing a woman think aloud).

"What is the tune?" I asked of an officer beside me.

"My faith, I can't recall for the moment. I've marked to it often enough, though. "Sambre-et-Meuse", perhaps. Look! There goes my battalion! Those Chasseurs yonder".

He knew, of course; but what could a stranger identify in that earth-shaking passage of thirty thousand?

ARTILLERY AND CAVALRY

The note behind the ridge changed to something deeper.

"Ah! Our guns", said an artillery officer, and smiled tolerantly on the last blue waves of the Line already beating towards the horizon.

They came twelve abreast — one hundred and fifty guns free for the moment to take the air in company, behind their teams. And next week would see them, hidden singly or in lurking confederacies, by mountain and marsh and forest, or the wrecked habitations of men — where?

The big guns followed them, with that longnosed air of detachment peculiar to the breed. The Gunner at my side made no comment. He was content to let his Arm Speak for itself, but when one big gun in a sticky place fell out of alignment for an instant I saw his eyebrows contract. The Artillery passed on with the same in-

human speed and silence as the Line; and the Cavalry's shattering trumpets closed it all.

They are like our Cavalry in that their horses are in high condition, and they talk hopefully of getting past the barbed wire one of these days and coming into their own. Meantime, they are employed on "various work as requisite", and they all sympathise with our rough-rider of Dragoons who flatly refused to take off his spurs in the trenches. If he had to die as a damned infantryman, he wasn't going to be buried as such. A troop-horse of a flanking squadron decided that he had had enough of war, and jibbed like Lot's wife. His rider (we all watched him) ranged about till he found a stick, which he used, but without effect. Then he got off and led the horse, which was evidently what the brute wanted, for when the man remounted the jibbing began again. The last we saw of him was one immensely lonely figure leading one bad but happy horse across an absolutely empty world. Think of his reception — the sole man of 40,000 who had fallen out!

THE BOCHE AS MR. SMITH

The Commander of that Army Corps came up to salute. The cars went away with the generals and the Minister for War; the Army passed out of sight over the ridges to the north; the peasant women stooped again to their work on the fields, and wet mist shut down on all the plain; but one tingled with the electricity that has passed. Now one knows what the solidarity of civilisation means. Later on the civilised nations will know more, and will wonder and laugh together at their old blindness. When Lord Kitchener went down the line, before the march past, they say that he stopped to speak to a General who had been Marchand's Chief of Staff at the time of Fashoda. And Fashoda was one of several cases when civilisation was very nearly manœuvred into fighting with itself "for the King of Prussia", as the saying goes. The all-embracing vileness of the Boche is best realised from French soil, where they have had large experience of it. "And yet", as some one observed, "we ought to have known that a race who have brought anonymous letter-writing to its highest pitch in their own dirty Court affairs would certainly use the same methods in their foreign politics. Why didn't we realise?"

"For the same reason", another responded, "that society did not realise that the late Mr. Smith, of your England, who married three wives, bought baths in advance for each of them, and, when they had left him all their money,



drowned them one by one".

"And were the baths by any chance called Denmark, Austria, and France in 1870?" a third asked.

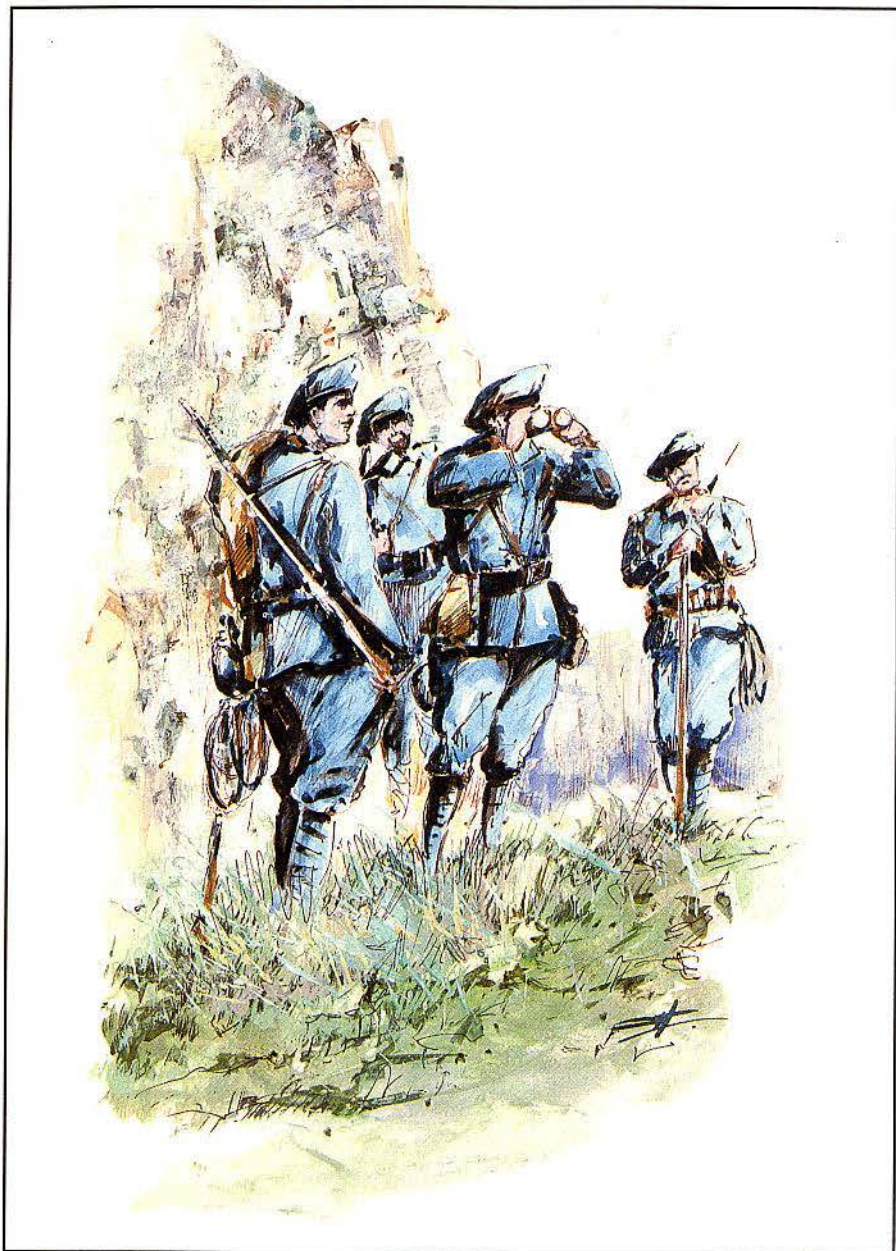
"No, they were respectable British tubs. But until Mr. Smith had drowned his third wife people didn't get suspicious. They argued that "men don't do such things". That sentiment is the criminal's best protection".

THE LAND THAT ENDURES

We passed into the zone of another army and a hillier country, where the border villages lay more sheltered. Here and there a town and the fields round it gave us a glimpse of the furious industry with which France makes and handles material and

troops. With her, as with us, the wounded officer of experience goes back to the drill-ground to train the new levies. But it was always the little crowded, defiant villages, and the civil population waiting unweariedly and cheerfully on the unwearied, cheerful army, that went closest to the heart. Take these pictures, caught almost anywhere during a journey: A knot of little children in difficulties with the village water-tap or high-handled pump. A soldier, bearded and fatherly, or young and slim and therefore rather sky of the big girls' chaff, comes forward and lifts the pail or swings the handle. His reward, from the smallest babe swung high in air, or, if he is an older man, pressed against his knees, is a kiss. Then nobody laughs.

Or a fat old lady making oration against some wicked young soldiers who, she says,



know what has happened to a certain bottle of wine. "And I meant it for all — yes, for all — yes, for all of you — this evening, instead of for the thieves who stole it. Yes, I tell you — stole it!" The whole street hears her; so does the officer, who pretends not to, and the amused half-battalion up the road. The young men express penitence; she growls like a thunderstorm, but, softening at last, cuffs and drives them affectionately before her. They are all one family.

Or a girl at work with horses in a ploughed field that is dotted with graves. The machine must avoid each sacred plot. So, hands on the plough-stilts, her hair flying forward, she shouts and wrenches till her little brother runs up and swings

the team out of the furrow. Every aspect and detail of life in France seems overlaid with a smooth patina of long-continued war — everything except the spirit of the people, and that is as fresh and glorious as the sight of their own land in sunshine.

A CITY AND WOMAN

We found a city among hills which knew itself to be a prize greatly coveted by the Kaiser. For, truly, it was a pleasant, a desirable, and an insolent city. Its streets were full of life; it boasted an establishment almost as big as Harrod's and full of buyers, and its women dressed

and shod themselves with care and grace, as befits ladies who, at any time, may be ripped into rags by bombs from aeroplanes. And there was another city whose population seemed to be all soldiers in training; and yet another given up to big guns and ammunition — an extraordinary sight.

After that, we came to a little town of pale stone which an Army had made its headquarters. It looked like a plain woman who had fainted in public. It had rejoiced in many public institutions that were turned into hospitals and offices; the wounded limped its wide, dusty streets, detachments of Infantry went through it swiftly; and utterly bored motor-lorries cruised up and down roaring, I suppose, for something to look at or to talk to. In the centre of it I found one Janny, or rather his marble bust, brooding over a minute iron-railed garden of half-dried asters opposite shut-up school, which it appeared from the inscription Janny had founded somewhere in the arid Thirties. It was precisely the sort of school that Janny, by the look of him, would have invented. Not even French adaptability could make anything of it. So Janny had his school, with a faint perfume of varnish, all to himself in a hot stillness of used-up air and little whirls of dust. And because that town seemed so barren, I met there a French General whom I would have gone very far to have encountered. He, like the others, had created and tempered an army for certain work in a certain place, and its hand had been heavy on the Boche. We talked of what the French woman was, and had done, and was doing, and extolled her for her goodness and her faith and her splendid courage. When we parted, I went back and made my profoundest apologies to Janny, who must have had a mother. The pale, overwhelmed town did not now any longer resemble a woman who had fainted, but one who must endure in public all manner of private woe and still, with hands that never cease working, keeps her soul and is cleanly strong for herself and for her men.

FRENCH OFFICERS

The guns began to speak again among the hills that we dived into; the air grew chillier as we climbed; forest and wet rocks closed round us in the mist, to the sound of waters trickling alongside; there was a tang of wet fern, cut pine, and the first breath of autumn when the road entered a tunnel and a new world — Alsace.

Said the Governor of those parts thoughtfully: "The main thing was to get those factory chimneys smoking again". (They were doing so in little towns and

villages all along.) "You won't see any girls, because they're at work in the textile factories. Yes, it isn't a bad country for summer hotels, but I'm afraid it won't do for winter sports. We've only a metre of snow, and it doesn't lie, except when you are hauling guns up mountains. Then, of course, it drifts and freezes like Davos. That's our new railway below there. Pity it's too misty to see the view".

Except for his medals, there was nothing about the Governor to show that he was not English. He might have come straight from an Indian frontier command.

One notices this approximation of type in the higher ranks, and many of the juniors are cut out of the very same cloth as ours. They get whatever fun may be going: their performances are as incredible and outrageous as the language in which they describe them afterwards is bald, but convincing, and — I overheard the tail-end of a yarn told by a child of twenty to some other babes. It was veiled in the obscurity of the French tongue, and the points were lost in shouts of laughter — but I imagine the subaltern among his equals displays just as much reverence for his elders and betters as our own boys do. The epilogue, at least, was as old as both Armies:

"And what did he say then?"

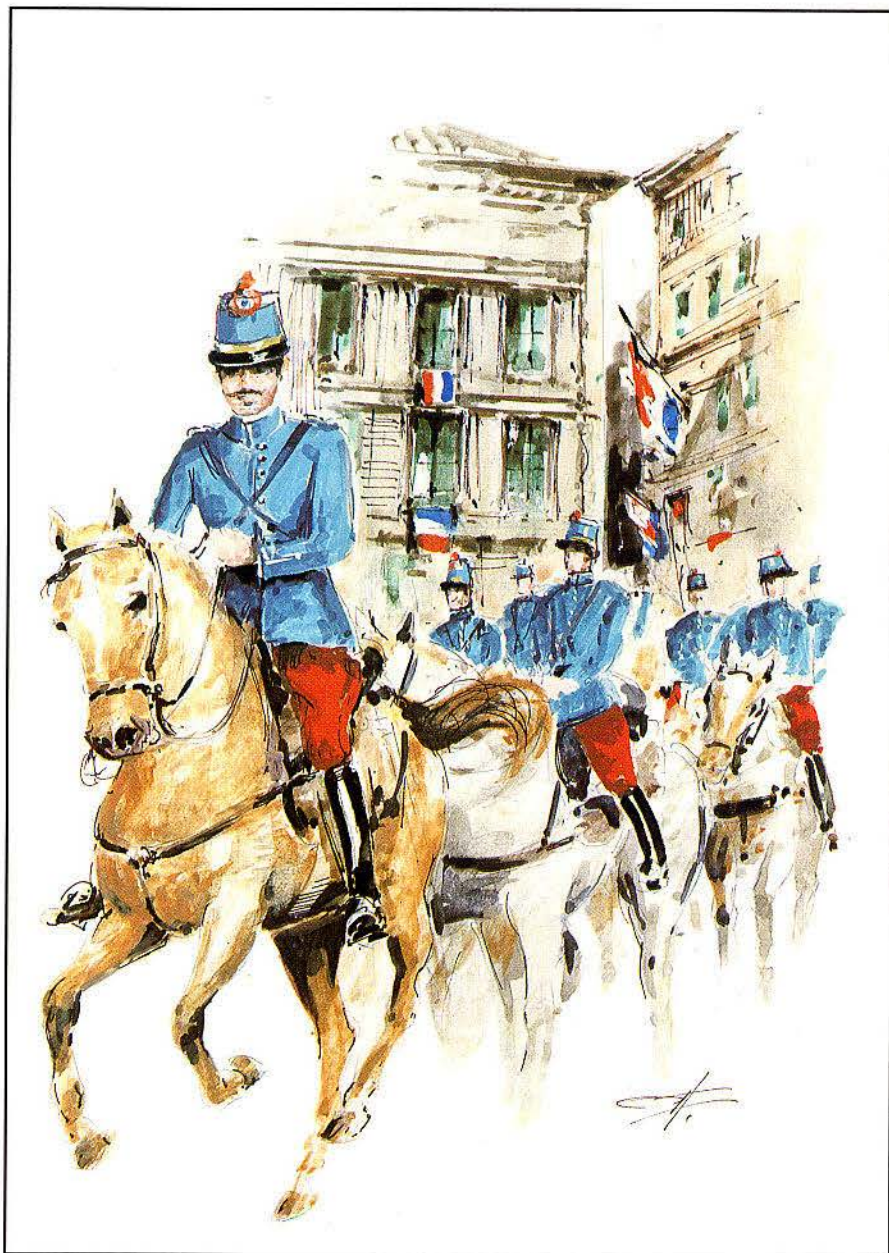
"Oh, the usual thing. He held his breath till I thought he'd burst. Then he damned me in heaps, and I took good care to keep out of his sight till next day".

But officially and in the high social atmosphere of Headquarters their manners and their meekness are of the most admirable. There they attend devoutly on the wisdom of their seniors, who treat them, so it seemed, with affectionate confidence.

THE INVENTIVE FRONT

When the day's reports are in, all along the front, there is a man, expert in the meaning of things, who boils them down for that cold official digest which tells us that "There was the usual grenade fighting at —. We made appreciable advance at —", etc. The original material comes in sheaves and sheaves, where individual character and temperament have full and amusing play. It is reduced for domestic consumption like an overwhelming electric current. Otherwise we could not take it in. But at closer range one realises that the Front never sleeps; never ceases from trying new ideas and weapons which, so soon as the Boche thinks he has mastered them, are discarded for newer annoyances and bewilderments.

"The Boche is above all things observant and imitative", said one who counted quite a few Boches dead on the front



of his sector. "When you present him with a new idea, he thinks it over for a day or two. Then he presents his rispote".

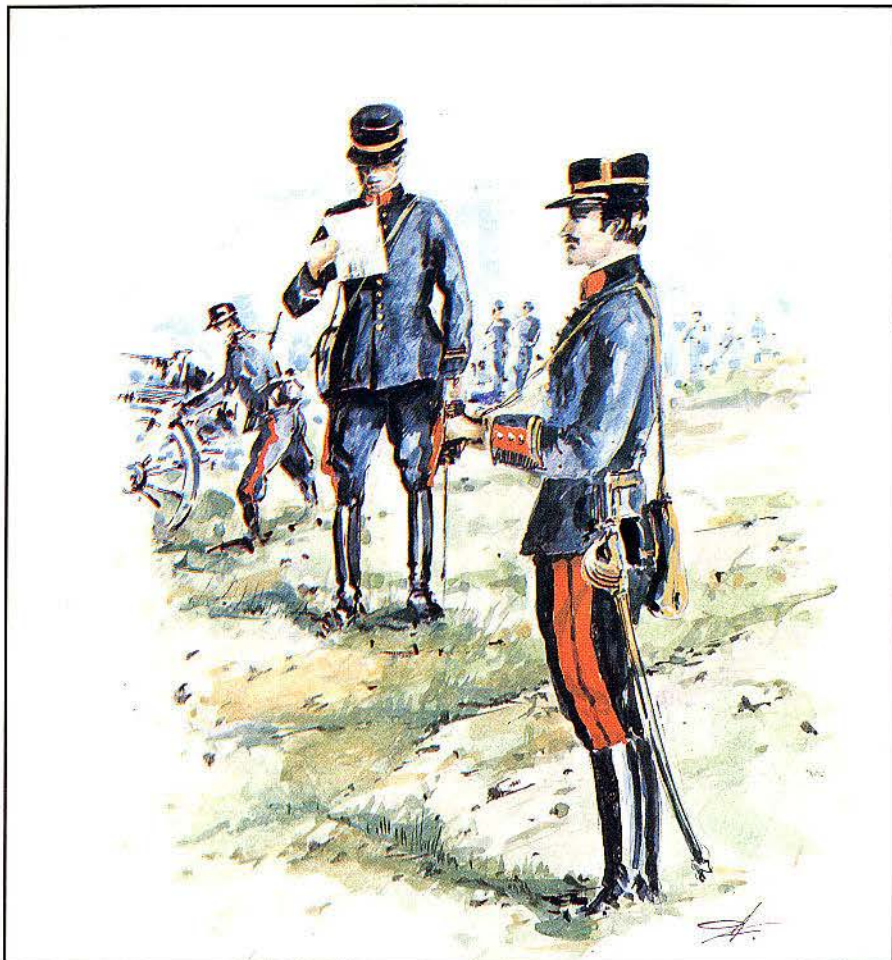
"Yes, my General. That was exactly what he did to me when I — did so and so. He was quite silent for a day. Then — he stole my patent".

"And you?"

"I had a notion that he'd do that, so I had changed the specification".

Thus spoke the Staff, and so it is among the junior commands, down to the semi-isolated posts where boy-Napoleons live on their own, through unbelievable adventures. They are inventive young devils, these veterans of twenty-one, possessed of the single ideal — to kill — which they follow with men as single-minded as themselves. Battlefield tactics do not exist;

when a whole nation goes to ground there can be none of the "victories" of the old bookish days. But there is always the killing — the well-schemed smashing of a full trench, the rushing out and the mowing down of its occupants; the unsuspecting battalion far in the rear, located after two nights" extreme risk alone among rubbish of masonry, and wiped out as it eats or washes itself; and, more rarely, the body encounter with animals removed from the protection of their machinery, when the bayonets get their chance. The Boche does not at all like meeting men whose womenfolk he has dishonoured or mutilated, or used as a protection against bullets. It is not that these men are angry or violent. They do not waste time in that way. They kill him.



THE BUSINESS OF WAR

The French are less reticent than we about atrocities committed by the Boche, because those atrocities form part of their lives. They are not tucked away in Reports of Commissions, and vaguely referred to as "too awful". Later on, perhaps, we shall be unreserved in our turn. But they do not talk of them with any babbling heat, or bleat, or make funny little appeals to a "public opinion" that, like the Boche, has gone underground. It occurs to me that this must be because every Frenchman has his place and his chance, direct or indirect, to diminish the number of Boches still alive. Whether he lies out in a sandwich of damp earth, or sweats the big guns up the crests behind the trees, or brings the fat, loaded barges into the very heart of the city, where the shellwagons wait, or spends his last crippled years at the harvest, he is doing his work to that end.

If he is a civilian he may — as he does — say things about his Government, which, after all, is very like other popular governments. (A lifetime spent in watching how the cat jumps does not make lion-tamers). But there is very little human rubbish knocking about France to hinder

work or darken counsel. Above all, there is a thing called the Honour of Civilisation, to which France is attached. The meanest man feels that he, in his place, is permitted to help uphold it, and, I think, bears himself, therefore, with new dignity.

A CONTRAST IN TYPES

This is written in a garden of smooth turf, under a copper-beech a glassy mill-stream, where soldiers of Alpine regiments are writing letters home, while the guns shout up and down the narrow valleys.

A huge wolf-hound, who considers himself in charge of the old-fashioned farmhouse, cannot understand why his master, aged six, should be sitting on the knees of the Maréchal des Logis, the iron man who drives the big car.

"But you are French, little one?" says the giant, with a yearning arm round the child.

"Yes", very slowly mouthing the French words; "I — can't — speak — French — but — I — am — French".

The small face disappears in the big beard.

Somehow, I can't imagine the Maréchal des Logis killing babies — even if his superior officer, now sketching the scene, were to order him!

The great building must once have been a monastery. Twilight softened its gaunt wings, in an angle of which were collected fifty prisoners, picked up among the hills behind the mists.

They stood in some sort of military formation preparatory to being marched off. They were dressed in khaki, the colour of gassed grass, that might have belonged to any army. Two wore spectacles, and I counted eight faces of the fifty which were asymmetrical — out of drawing on one side.

"Some of their later drafts give us that type", said the Interpreter. One of them had been wounded in the head and roughly bandaged. The others seemed all sound. Most of them looked at nothing, but several were vividly alive with terror that cannot keep the eyelids still, and a few wavered on the grey edge of collapse.

They were the breed which, at the word of command, had stolen out to drown women and children; had raped women in the streets at the word of command; and, always at the word of command, had sprayed petrol, or squirted flame; or voided their excrements on the property and persons of their captives. They stood there outside all humanity. Yet they were made in the likeness of humanity. One realised it with a shock when the bandaged creature began to shiver, and they shuffled off in response to the orders of civilised men.

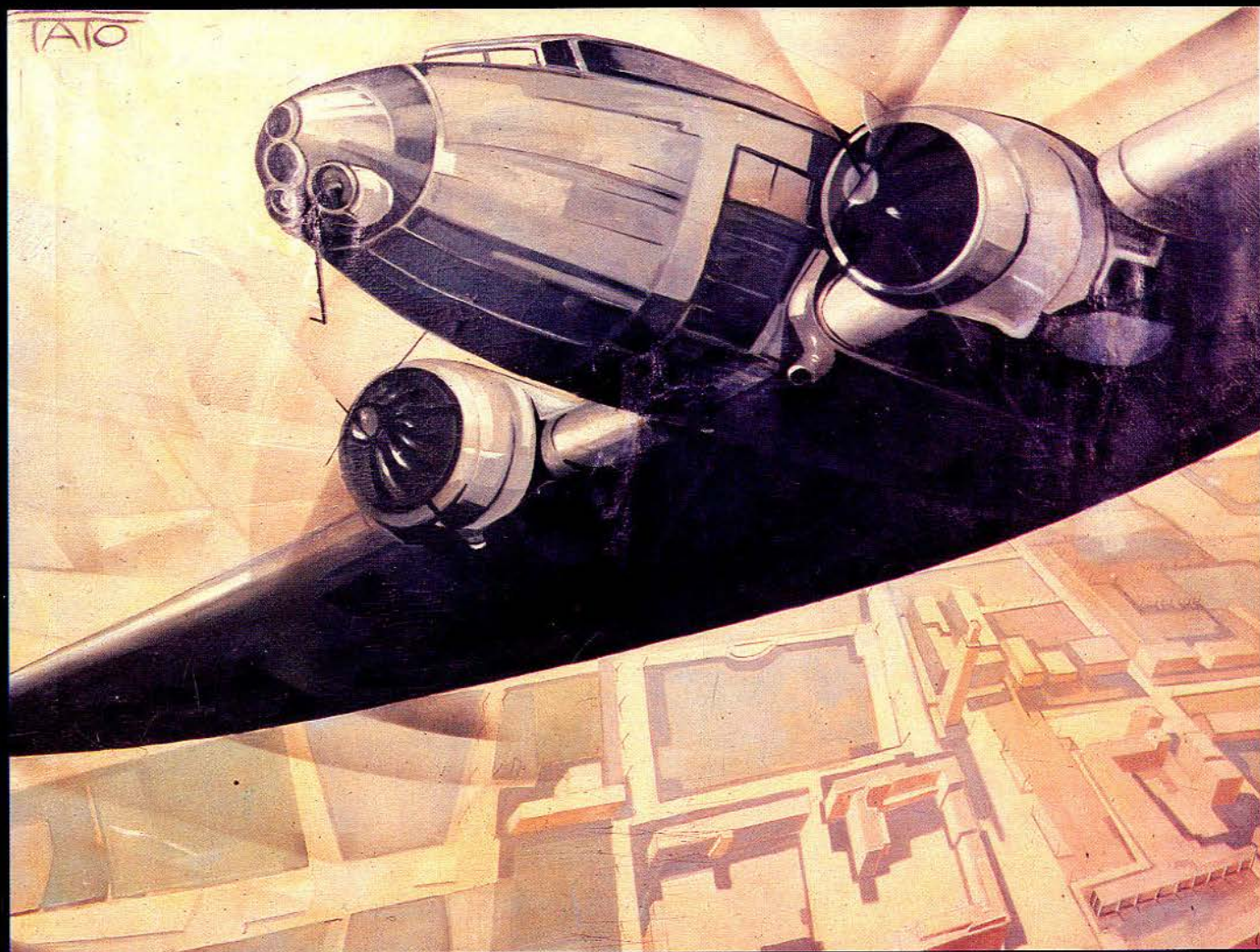
Rudyard Kipling

FRANCE AT WAR

BATTLE SPECTACLE AND A REVIEW

TATO

FUTURIST AND AIRPAINTER



In the interesting autobiographical book "Tato raccontato da Tato" (Tato told by Tato), we read "Tato entered the Parma military Academy, became an officer and left for the front".

This is the year 1917 and the painter, I again quote from the text: "who nature had endowed with the gift of art", had his first drawings of the war published. In the year 1919, enthusiastic over the Futurist Movement, he seeks a pretext to

make himself known. He finds it by taking part, still wearing the lieutenant's uniform, in a publicity competition announced in Novara by the shoe manufacturer Bernina.

Guglielmo Sansoni (not yet rechristened Tato) exhibits a myriad of colours and marks without the slightest hint at shoes, with a big inscription "shady self-portrait" and below "Give me a knife and I'll kill my jerking shadow". It was a scandal throughout the city and collect-

Tato: *«Sorvolando Sabaudia», («Flying over Sabaudia») Vigna di Valle Museo dell'Aeronautica.*

ed severe criticism on all the local papers and a challenge to a duel, while Marinetti, informed of what had happened, sent the daring officer an enthusiastic telegram which ended with a "Bravooooo!". It was his consacration as painter against the past and, tout-court, futurist.

However, the artist was born to futurism, with the name of Tato, on

16 September, 1920 when he organized his own funeral with invitations to attend. The book says: "The friends" dismay, flowers, wreaths and eventually surprise": Tato on the hearse, hale and hearty. Royal guards; arrest, a denunciation, which all ended for the best. Guglielmo Sansoni was dead and, new Phoenix, a painter who would henceforth call himself **TATO** was born. After this event, there is a succession of exhibitions in Italy and abroad, mingled with futurist evenings of all kinds, quarrels, misunderstandings and recognitions; no end of battles with Marinetti and all the overabundant lot of old and new futurists, famous and very famous supporters of the avant-garde (from Balla to Fillia, from Prampolini to Depero, from Pratella to Dottori, from Sant'Elia to Russolo, not to speak of many more of greater or lesser importance). After the Manifesto of Photography signed by Marinetti and Tato, the latter becomes a painter from the air, art in which he dominates as the great creator of synthetic-dynamic works. Tato who had already flown on small fighters with overlapping wings, convinces Balla and other friends to board for the first time a big Caproni aircraft. It is thus decided to draft an Air-Painting Manifesto signed by Balla, Benedetta, Depero, Dottori, Fillia, Marinetti, Prampolini, Somenzi and Tato.

Henceforth, it is no small task to follow the painter in his pyrotechnical and ingenious stunts, in his overseas odysseys in America or Africa (from where in the numberless one man or collective exhibitions, both futurist and from the air, as in the many Venice Biennale, following his creativity through hundreds and hundreds of paintings (not to speak of the frescoes in the airports of Ferrara, Venice, Siracuse, Guidonia, Tripoli and in many other public offices) some totally futurists, others with figurative repêchage (a recurring feature in Tato's works. It has been said that "Airpainting is, among futurists, the easiest to understand). It is no small task to im-

Guglielmo Sansoni (Tato) was born in Bologna on 29 December, 1896 and died in Rome in January 1974.

He was a volunteer in the 1915-1918 war during which he becomes a close friend with Boccioni, Russolo e Sironi. At the end of his military service he goes back to Bologna where he organizes, together with Leo Longanesi, Aldo Giovannini, Fanelli, Caviglioni and Federico Valli, then university students rebelling against time-serving, the first futurist group of Emilia, which he later heads with great success.

On September 16, 1920 he arranges his own funeral and summons to the house of the deceased Guglielmo Sansoni, a coffin, flowers, wreaths and hearse. He also assures the presence of the Royal Guards who break up the funeral procession and take Tato to the Police station.

Guglielmo Sansoni had wanted to bury his own corpse to officially announce the birth of the painter Tato, futurist, determined to devote himself to an intense activity of artistic-political propaganda designed to spread the Italian futurist movement to the Emilia-Romagna region.

He thus regularly corresponds with Marinetti whom he meets in Milan towards the end of 1920.

On 22 January 1922, in Marinetti's presence, he organizes in Bologna the first futurist art exhibition at the Modernissimo theatre.

In 1924 he moves to Rome and is in touch with the Roman futurist circles which he comes to know by setting up a one man show in the Bragaglia gallery.

He takes part in the Venice Biennale from 1926 to 1950 (He is awarded a prize at the XXIII Biennale) and in all the important futurist exhibits of Europe and of the world during the 30s (1932: in Paris, Galerie de la Renaissance with the painters Alberti, Alimandi, Ambrosi, Andreoni, Balla, Benedetta, Bot, Caviglioni, Cocchia, Cralli, Depero, Dulgheroff, Dormal, Dottori, Duse, Fillia, Marisa Mori, Munari, Oriani, Pozzo, Prampolini, Rosso, Saladini, Thayaht, Albissola, Vignazia and Zucco; 1937: in Amsterdam, Zurich, New York, Chicago, Rio de Janeiro, etc.).

On 16 April, 1930, together with Marinetti he signs the "Manifesto of futurist photography".

In Rome, in 1931, he organizes in the "Camerata degli Artisti" close to the Spanish steps, the first airpainting exhibition and signs the airpainting "Manifesto" together with Balla, Benedetta, Depero, Dottori, Fillia, Marinetti, Prampolini and Somensi.

The following obtained by airpainting among painters marked 1931 as an essential date. Marinetti greeted the young innovator with the following words: "Tato is the first to infuse palpitations and sweat of petrol, castor oil, calories and drive into the heavy three engine aircraft in a relationship of contrast-relationship with the transparent, evaporating, cotton wool, gauze or woolly texture of the atmosphere. I have a feeling that he is not going to stop at this first interesting invention".

In 1934, when the Second Colonial Art Exhibition was being held in Naples, he signs the Manifesto on African Art together with Marinetti, Fillia and Cocchia.

He takes part in the first five Quadrennials in Rome.

He paints the frescoes in the airports of Siracusa, Tripoli, Guidonia and in many government buildings in Palermo, Trento, Gorizia and other public buildings such as schools, villas and the seat of the "Corriere Padano" in Ferrara with the Madonna dell'Aria, which Balbo and Quilici had ordered him.

He creates decorative reliefs in the pilots' pavilions at the Milan, Tripoli and Paris Fairs.

After the war the figures that Tato still composes far from denying the previous conquests (futurism, airpainting, synthetism, cubism and dadaism, etc.), are not far off from contemporary aesthetics in many ways.

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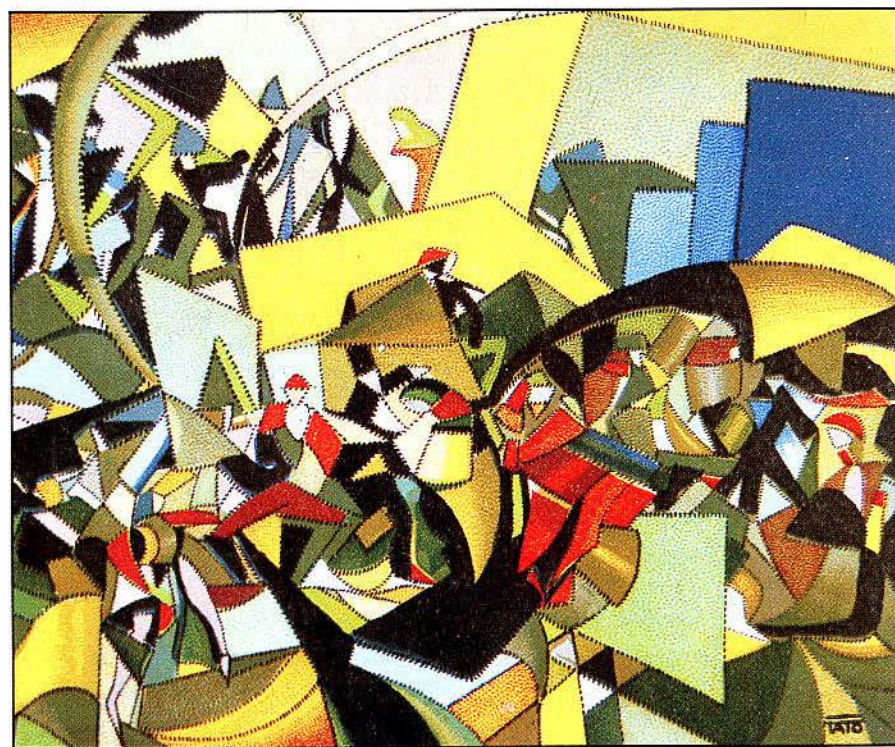
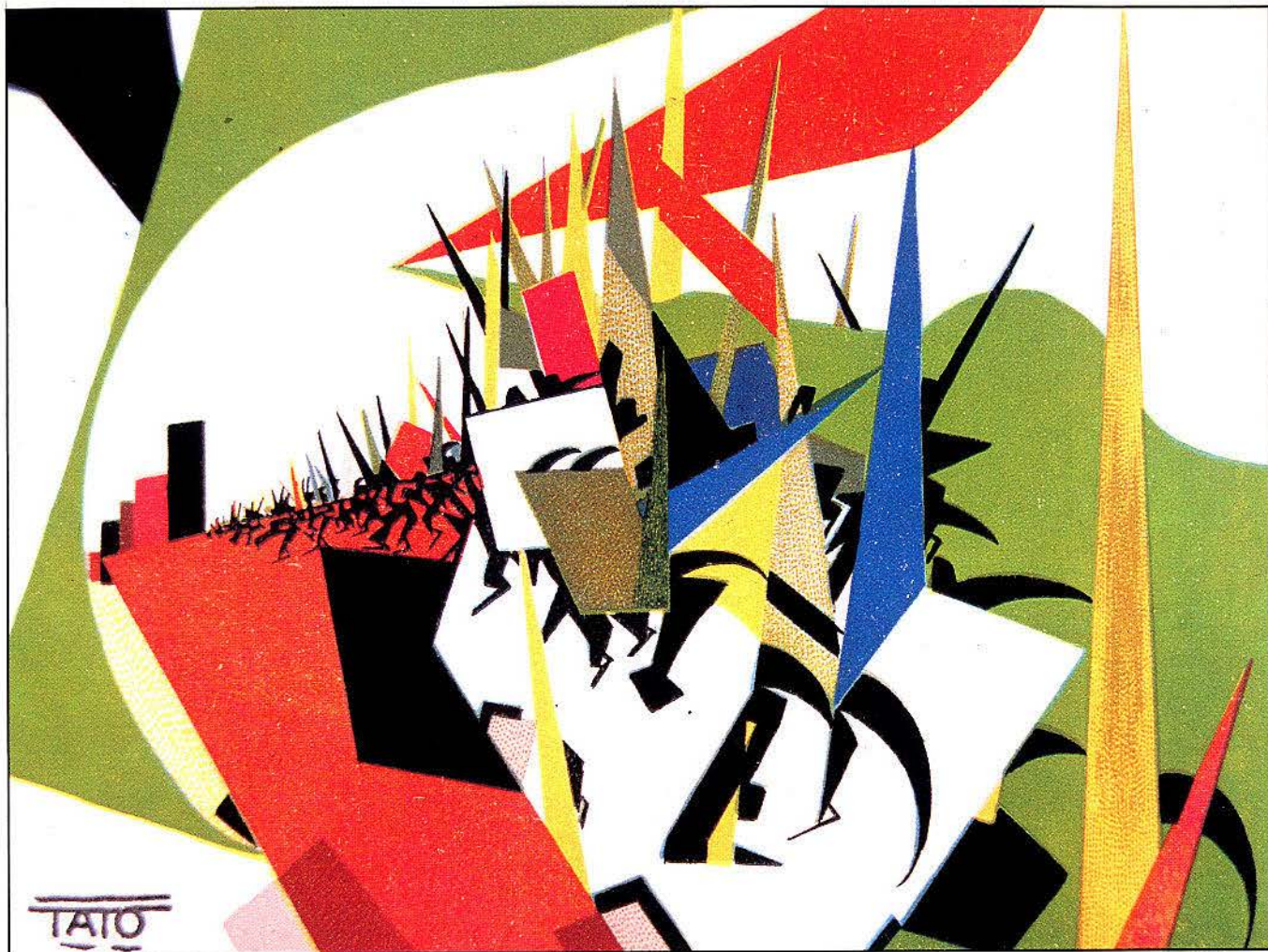
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Salvatore Ventura

agine his friendly relations with famous men of his time, especially with Balbo who believed in the importance of aviation and admired air-painters. Difficult though this may be, it is important and even neces-

sary if we really wish to understand the value of an artist and the exact dimension of a period in which he lived and worked. We live at a time in which historical survey, quite right from an ethico-political view-



Above.
Tato: «La Festa dei Gagliardetti» (*The Feast of the Pennons*).

Left.
Tato: «Pavillon Doré».

point, as well as prejudice, unfair from an aesthetical point of view, still impugn an evaluation of Art. There is another negative fact to be considered: nowadays it is often the trend of the market to draw the attention of both public and critics. We witness a levitation of the quality value through publicity and market quotations.

This is wrong especially in consideration of the ensuing strains: the drawing of a Renaissance painter, even a famous one, is valued the same price as an... American popartist, artfully exaggerated as regards quotations and value.

Let us go back to Tato. Marinetti writes of him: "The airpainter



Tato was the first to infuse palpitations and sweat of petrol, castor oil, calories and drive into the heavy three engine aircraft in a relationship of contrast-friendship with the transparent, evaporating, cotton wool, gauze or woolly texture of the atmosphere". Actually, it seems as if Tato transferred to his airpainting canvasses all of his passion and indeed of himself in an almost physical relationship with the aircraft; in fact, Bino Binazzi describing the characteristic features of the artist, writes: "as slim as a candle" but "vibrating as a blade", and further "an athlete's soul in an acrobat's body"; "he strongly felt the call of the air vision".

The many painting are testimony of the above. (The first dates back to 1919 and is entitled "Protecting the flight mate").

These paintings depict beautiful panoramic views with oblique lines

drawn vertically which open like a fan or draw together in concentric circles and which are among the most interesting things of airpainting (suffice it to remember "Sensazioni di Volo" (Feelings during flight), "Aeroplani (Aircraft)", "Urbanismi obliqui" (Oblique Urbanisms), "Vuoto d'Aria" (Air Pocket), "Spiralata" (Spiralling), "Avviamento" (Spinning), but he also loved aircraft for their sake alone, their vibrating shine, the aerodynamic shapes, slim like female bodies; and on upto the so-called war painting which, beyond the propagandistic emphasis, has its own incisive beauty, pictorial transfiguration of events which are chronicle only in appearance.

We have not wanted to carry out a critical investigation on Tato's work nor speak of our relationship as relatives (which started with a violent quarrel with Tato dressed as a whitewasher: vest and paper hat in

Tato: «La Marcia su Roma» (March on Rome).

the Severini style, all stained with paint!), but only recall some of the milestones of his life on earth; because, in fact, all of Tato's work, from his beginnings in the world of Futurism to the Dadaism of the objects photographed in transparency, assembled together or overlapping, from the highly coloured sketches of fellow-tenants, to the almost abstract landscapes seen at high speed, upto the more realistic works of the second post-war period (why not think of the magic "Visioni di Comacchio" (Visions of Comacchio) or the last blossoming in an expressionist key of his sacred works?) speaks of a life dedicated to art still however to be discovered and analysed in an unitarian manner. It would be a surprise for us all.

Vinicio Saviantoni

ENGLISH - ITALIAN

GLOSSARY

F

to face, s.
to f. the enemy
facility,
 recreational **f.** (al pl.)
factor,
 conversion **f.**
 nuclear transmission **f.**

 range safety **f.**
 time and space **f.** s.
Fall,
f. exercise (FALLEX)
 free **f.**
 stone **f.**
f. trap
to fall, v.i.

fallout,
 beginning **f.** (BF)

 end **f.** (EF)

f. contours

f. pattern

f. safety height (HOBFs)

farewell,
farrier,

affrontare
 affrontare il nemico
 agevolazione
 attrezzature sportive
 fattore
 fattore di conversione
 fattore di trasmissione
 nucleare
 altezza di sicurezza
 fattori di tempo e di spazio
 caduta; (USA) autunno
 esercitazione annuale
 caduta libera
 caduta di pietre
 trabocchetto
 cadere, soccombere,
 diminuire, morire,
 dividersi
 ricaduta radioattiva
 ora di inizio della ricaduta
 radioattiva
 ora di termine della
 ricaduta radioattiva
 limiti della ricaduta
 radioattiva
 carta delle linee
 d'isointensità
 altezza di scoppio di
 sicurezza da ricaduta
 saluto di commiato
 maniscalco

fatigue,
f. duty
feature

 dominant terrain **f.** s.
 terrain **f.** s.
to feed,
f. system
feeding,

to feint,
Fence,
 double apron **f.**

 wire **f.**

ferry-boat,
ferrying,
field, (Fd)

 air **f.**
 battle **f.**
f. artillery
f. bed
f. craft
f. engineering
f. exercise

f. fortification
f. glasses

fatica; uomo di fatica
 comandata
 lineamento;
 configurazione; forma
 terreno dominante
 forme del terreno
 alimentare, vettovagliare
 sistema di alimentazione
 vettovagliamento,
 alimentazione
 lanciare un finto attacco
 siepe, recinto
 siepe di filo spinato
 doppia
 siepe (recinto) di filo
 spinato
 nave traghetto
 traghettamento
 campo, campagna,
 terreno
 aerocampo, aeroporto
 campo di battaglia
 artiglieria da campagna
 letto da campo
 sfruttamento del terreno
 lavori campali
 esercitazione campale,
 campo d'arma
 fortificazione campale
 cannocchiale da
 campagna

f. hospital
f. Marshal
f. officer
f. of fire
f. of view
f. practice
f. train
 landing **f.**
 mine **f.**
 observation **f.**
 visual **f.**
to fight,
fighter,

f. bomber
 jet-**f.**
Fight(Ing),
 bayonet **f.**

close **f.**
f. efficiency
f. line
 hand-to-hand **f.**
file,

f. folder
f. number
 single **f.**
 to break **f.** s.
 to close **f.** s.
film,
f. strip
 training, **f.**
filter,
 oil **f.**
finance,
financing,
finder,
 direction **f.**
range, f.
 telescopic **f.**
finding,
 direction **f.** (D/F)
fire,
 adjusting **f.**
 antiaircraft **f.**
 antitank **f.**
 artillery **f.**
 assault **f.**
 barrage **f.**

close defensive **f.**

close interdiction **f.**

close supporting **f.**

concentrated **f.**
 concentration **f.**

continous **f.**
 counterbattery **f.**
 countermortar **f.**

ospedale da campo
 Maresciallo (Gen.)
 Ufficiale Superiore
 campo di tiro
 campo di vista
 tattica militare
 trasporti militari
 campo di atterraggio
 campo minato (v.)
 campo di osservazione
 campo visivo
 combattere, lottare
 combattente, (aeron.)
 aereo da caccia
 cacciabombardiere
 caccia a reazione
 combattimento, lotta
 combattimento alla
 baionetta
 lotta ravvicinata
 efficienza combattiva
 linea di combattimento
 lotta corpo a corpo
 lista, protocollo, fila
 (di persone)
 raccoglitore di carteggio
 numero di protocollo
 fila indiana, per uno
 rompere le file
 serrare le file
 film
 filmina
 film addestrativo
 filtro
 filtro dell'olio
 finanza, amministrazione
 finanziamento
 scopritore
 radiogoniometro
 telemetro
 mirino telescopico
 scoperta, ritrovamento
 orientamento
 fuoco, tiro
 tiro di aggiustamento
 tiro (fuoco) contraereo
 tiro (fuoco) controcarri
 fuoco di artiglieria
 fuoco di assalto
 tiro (fuoco) di
 sbarramento
 fuoco a distanza
 ravvicinata
 fuoco di interdizione
 vicina
 fuoco di
 accompagnamento
 tiro concentrato
 fuoco (tiro) di
 concentramento
 fuoco continuo
 fuoco di controbbatteria
 fuoco (tiro) contromortai

counterpreparation **f.**
 covering **f.**
 cross-**f.**
 defensive **f.** (DF)
 destruction **f.**
 direct **f.**
 final protective **f.** (FPF)

f. action
f. for effect
f. line
f. on call
f. plan
f. within the battle
 position
 flat-trajectory **f.**
 flanking **f.**
 harassing **f.**
 high angle **f.**
 indirect **f.**
 long range **f.**
 long range interdiction **f.**

masked **f.**
 naval gun **f.**
 neutralization **f.**
 nuclear **f.**
 observed **f.**
 overlapping **f.**

prearranged **f.**
 preparation **f.**
 registration **f.**
 smoke shell **f.**
 spreading **f.**
 support **f.**
 suppression **f.**
to be fire,
 to b fired upon

firer,
firing,
 ceck **f.**
 cease check **f.**
f. charge
f. exercise
f. pin
f. position

f. range
first endorser,
First line loads
(ammo),
fission,
 nuclear **f.**
fitness,
 physical **f.**
Fixed wing aircraft,
Flag,
 national **f.**
 signal **f.**

fuoco di
 contropreparazione
 fuoco di copertura
 tiro (fuoco) incrociato
 fuoco difensivo
 tiro di distruzione
 tiro diretto
 linea di arresto
 automatica
 azione di fuoco
 fuoco (tiro) di efficacia
 linea di tiro
 fuoco su richiesta
 piano dei fuochi
 fuoco nell'interno della
 posizione di resistenza
 tiro teso
 tiro fiancheggiato
 tiro di disturbo
 tiro curvo
 tiro indiretto
 fuoco a distanza
 fuoco d'interdizione
 lontana
 tiro mascherato
 fuoco navale
 fuoco di neutralizzazione
 fuoco nucleare
 tiro osservato
 fuoco sovrapposto,
 sovrapposizione dei
 fuochi
 fuoco (tiro) predisposto
 fuoco di preparazione
 tiro d'inquadramento
 tiro nebbiogeno
 tiro non convergente
 fuoco di appoggio
 fuoco di repressione
 far fuoco, sparare
 essere sottoposto al
 fuoco
 tiratore
 il far fuoco, sparo
 sospendere il fuoco
 riprendere il fuoco
 innesco
 esercitazione di tiro
 punta del percussore
 base di fuoco, centro di
 fuoco
 poligono di tiro
 1° revisore
 dotazione di 1ª linea
 (munizioni)
 fissione
 fissione nucleare
 attitudine, idoneità
 idoneità fisica
 velivolo ad ala fissa
 bandiera
 bandiera nazionale
 bandiera da segnalazione

flak,
flame,
f. tkower
flank,
exposed **f.**
f. guard

f. protection

flare,
f. pistol
f. signal
parachute **f.**

flash,

flashless,
Fleet

air **f.**
flexibility,
flight,
f. diagram
f. path
f. line
f. manifest
f. unit
f. serial
free **f.**
level **f.**
non-stop **f.**
test **f.**
flow,
supply **f.**
traffic **f.**

fluid,
antifreeze **f.**
brake **f.**
f. oil
to fly,
flying,
f. mission
instrument **f.**
stunt **f.**
fodder,
foe,
to follow,
f.-up supplies

Food
additional **f.**
messing **f.**
Foot,

f. bridge
f. march
forage,
force,
ACE Mobile F. (AMF)
airborne **f.**
Air F. s. (AF)

fuoco antiaereo, shrapnel
fiamma
lanciafiamme
fianco
fianco esposto
elementi di sicurezza sui fianchi
fiancheggiamento,
protezione sui fianchi
razzo illuminante
pistola di segnalazione
segnale con razzo
razzo illuminante con paracadute
lampo (Z) qualifica di precedenza nei messaggi), vampa
senza vampa
flotta
flotta aerea
flessibilità
volo
diagramma di volo
traiettoria di volo
asse di passaggio
manifesto di volo
unità di volo
serie di volo
volo libero
volo orizzontale
volo senza scalo
volo di prova
flusso, volume
flusso di rifornimenti
volume di traffico, portata stradale
fluido, olio
fluido anticongelante
olio per i freni
olio fluido
volare
volante, volo
missione di volo
volo strumentale
volo acrobatico
foraggio secco
nemico avversario
seguire
rifornimenti al seguito
successivi
vitto, alimentazione
viveri suppelletari
rancio
piede, piede (misure di lunghezza pari a m. 0, 305
passerella
marcia a piedi
foraggio
forza
Forza Mobile di ACE
forza aviotrasportata
Forze aeree (Aviazione)

air strike **f.**
Allied Tactical Air F. (ATAF)
amphibious **f.**
Armed F.s.
assigned **f.**
blue **f. s.**
covering **f.**

earmarked for assignment **f.**
earmarked for assignment on mobilization **f.**

enemy **f. s.**
f. allocated to NATO
f. chopped to NATO
friendly **f. s.**
garrison **f. s.**
joint **f. s.**
land **f.**
landing **f.**
mobile **f.**
multilateral **f.**
NATO allocated **f. s.**
naval **f. s.**
non-integrated **f. (NIF)**
orange **f. s.**
other **f. s. for NATO**
reaction **f.**
tactical air **f. (TAF)**
task **f.**

forcing,
minefield **f.**
forecast,
weather **f.**
foreign
F. Office
Foresight,
ford,
fordable,
fording,
deep **f.**
forklift
form,
disposition **f.**
message **f.**
qualification **f.**

formation,
attack **f.**
battle **f.**

column **f.**
combat **f.**

diamond **f.**
flying **f.**
line **f.**
marching **f.**

froza d'attacco aereo

Forza Aerotattica Alleata
forza anfibia
Forze Armate
forza assegnata
forze azzurre
forza di copertura,
dispositivo di sicurezza
forza precettata per l'assegnazione

forza precettata per l'assegnazione in caso di mobilitazione
forze nemiche
forze destinate alla NATO
forze destinate alla NATO
forze amiche
forze di guarnigione
interforze
forza terrestre
forza di sbarco
forza mobile
forza multilaterale
forze NATO
forze navali
forza non integrata
forze arancione
altre forze per la NATO
forza di reazione
forza aerea tattica
forza organizzata per un compito specifico
forzamento
forzamento campi minati
previsione
previsione del tempo
estero, straniero
Ministero degli Esteri
mirino (di un'arma)
guado
guadabile
guado, il guada
gaudio profondo
sollevatore a forcilla
modulo, formato, forma
foglio disposizioni
modulo per messaggi
documentazione
psicotecnica
formazione, ordine
formazione di attacco
formazione per la battaglia
formazione in colonna
formazione di combattimento
formazione a losanga
formazione di volo
formazione di linea
dispositivo di marcia

movement **f.**
open **f.**
spread-out **f.**
wedge **f.**
forming-up,

f. place

fortification,
field **f.**
permanent **f.**
fortified,
f. positions
fortress,
forward (Fwd)
f. defence
f. echelon
f. edge of battle area (FEBA)
f. Line of Own Troops (FLOT)
to forward,
to f. a letter
foxhole,

double **f.**

single **f.**

fracture,
fragmentation,
f. bomb
f. hand grenade

f. mine

freedom,
f. of action
f. of manoeuvre
freezing,
f. point
freight,
frequency,
f. band
f. channel
f. modulation (FM)
high **f.** (HF)
low **f.** (LF)
super high **f.** (SHF)
ultra high **f.** (UHF)
very high **f.** (VHF)
very low **f.** (VLF)

Friendly,
f. forces
Frogman,

front,
encirclement **f.** bridge
f. line
f. of attack
holding **f.**
main **f.**

formazione di movimento
formazione aperta
formazione spiegata
formazione a cuneo
assunzione di una formazione
luogo di assunzione di una formazione
fortificazione
fortificazione campale
fortificazione permanente
fortificato
posizioni fortificate
fortezza
in avanti, avanzato
difesa avanzata
scaglione avanzato
limite avanzato dell'area della battaglia
linea avanzata delle proprie truppe
avanzare, inoltrare
inoltrare una lettera
buca, appostamento, riparo
appostamento per due tiratori
appostamento per un uomo in piedi (per tiratore isolato)
frattura
rottura in pezzi
bomba dirompente
bomba a mano a frattura
prestabilità
mina antiuomo (a frattura prestabilita)
libertà d'azione
libertà d'azione
libertà di manovra
congelamento
punto di congelamento
carico, merce, trasportata
frequenza
banda di frequenza
canale di frequenza
modulazione di frequenza
alta frequenza
bassa frequenza
frequenza super alta
frequenza ultraelevata
frequenza altissima
frequenza bassissima
amico, amichevole
forze amiche
uomo rana, sommozzatore
fronte
fronte di accerchiamento
linea del fronte, 1ª linea
fronte di attacco (UK)
fronte d'investimento
fronte principale

frontage,
attack **f.**
frontal,
f. attack
frontrallier,
frontier,
frost,
f-bite

f.-bitten

white **f.**
frozen,
f. meat
fuel,
f. s and lubricants
f. consumption unit (FCU)
to fulfil,
to f. an order
to f. one's duty

fulfillment,

function,
administrative **f.** s.
functioning,
staff **f.**

fund,

NATO funded

fungus,
fuse, (fuze)
base detonating **f.** (BD)

boresafe **f.**

direct action **f.** (DA)

dummy **f.**
f. body
f. delay
mechanical time **f.** (MT)

percussion **f.**
point detonating **f.** (PD)
or point initiating **f.** (PI)
super-quick **f.** (SQ)
time and percussion **f.** (TP)
time (fixed) **f.**
time super-quick **f.** (TSQ)

variable time **f.** (VT)

fuselage,
fuse,

fronte di spiegamento
fronte di attacco (USA)
frontale
attacco frontale
confinario
frontiera
gelo, gelata, ghiaccio
congelamento (di parte del corpo)
colpito da congelamento, congelato
brina
congelato
carne congelata
carburante, combustibile
carburanti e lubrificanti
unità di consumo
carburanti
adempiere, compiere
eseguire un ordine
compiere il proprio dovere
adempimento, compimento, esecuzione
funzione
funzioni amministrative
funzionamento
funzionamento del Comando
fondo, stanziamento, sovvenzione
sovvenzionato dalla NATO
fungo (agente biologico)
spoletta
spoletta di fondello a percussione
spoletta con sicurezza di sparo
spoletta di ogiva a percussione istantanea
falsa spoletta
corpo di spoletta
spoletta ritardata
spoletta meccanica a tempo
spoletta a percussione
spoletta di ogiva a percussione
spoletta istantanea
spoletta a doppio effetto
spoletta a tempo (fisso)
spoletta a doppio effetto istantanea
spoletta di prossimità
fusoliera
(v.fuse) spoletta

gallantry,
decoration for **g.**
gallon,
game,

war **g.**
gamma,
g. particles
g. rays
gap,
a. **g.** in the defences
column **g.**

march unit **g.**

minefield **g.**
widening of a **g.**

Garrison,

g. forces
gas, (v. agente)
chking **g.**
g. mask
g. proof
nerve **g.**
non-persistent **g.**
persistent **g.**
poison **g.**
tear **g.**
vomiting **g.**
war **g.**
gasoline, (USA)
aviation **g.** (AVGAS)
g. motor
motor **g.** (MOGAS)
gastroenteric,
g. affection
general, (GEN)
brigadier **g.** (Birg.)
commanding **g.** (CG)
lieutenant **g.** (LTGEN)

major **g.** (MAJGEN)

g. Staff
general, (agg.)
g. support (GS)

generator,
electrical **g.**
hand **g.**
germ,
glacier,
glass,
field **g.** es
snow **g.** es
glider,
gliding,
glissade,
global,
glossary,

valore, prodezza
decorazione al valore
gallone (pari a lt. 4,546)
partita, gioco, gara,
esercizio, sportivo
manovra coi quadri
gamma
particella gamma
raggi gamma
breccia, varco, intervallo
una breccia nelle difese
intervallo tra elementi di
una colonna in marcia
intervallo tra unità di
marcia
varco in campo minato
allargamento di una
breccia
guarnigione,
distaccamento, presidio
forze di guarnigione
gas, aggressivo chimico
gas soffocante
maschera antigas
antigas, a prova di gas
gas nervino
gas fugace
gas persistente
gas tossico
gas lacrimogeno
gas vomitorio
gas di guerra
benzina
benzina per aerei
motore a benzina
benzina per automezzi
gastroenterico
affezione gastroenterica
generale (grado)
Generale di Brigata
Generale Comandante
Generale di Corpo
d'Arma
Generale di Divisione,
Maggior generale
Stato Maggiore
generale
appoggio generale,
massa di manovra,
appoggio indiretto
generatore
generatore di corrente
generatore a mano
germe
ghiacciaio
vetro, occhiali (al pl.);
binocolo da campagna
occhiali da neve
aliante
volo librato
scivolata (su neve)
globale, mondiale
glossario

goal,

goniometer,
gorge,

gorget patch,
government,
grade,
grader,
gradient,

to graduate,

graph,
march **g.**
operational road
movement **g.**
grave,
burials and **graves**
registration
g. yard
gravity,
centre of **g.** (CG)
grease,
graphited **g.**
g. pencil
grenade,
g. launcher
hand **g.**
hand **g.** fragmentation
rifle **g.**
grid,

g. azimuth
g. convergence
g. coordinated
g. reference
g. system

military **g.**
ground,
actual **g.** zero
desired **g.** zero (DGZ)
drill-**g.**

g. action
g. Liaison Officer (GLO)

g. order of battle
(GROBAT)
g. order of War
(WARBAT)

g. zero (GZ)

high **g.**
vital **g.**
group,
addresses indicator **g.**
(AIG)
army **g.**

meta, traguardo, scopo,
obiettivo, risultato da
raggiungere
goniometro
gola, forra, passaggio
stretto in montagna
mostrina
governo
grado
livellatrice
pendenza, inclinazione,
gradiente
diplomarsi, conseguire un
diploma
grafico, diagramma
grafico di marcia
grafico di
movimento
tomba, sepoltura
registrazione tombe e
sepulture
cimitero
gravità
centro di gravità
grasso
grasso grafitato
matita dermografica
granata, bomba
lanciabombe
bomba a mano
bomba a mano difensiva
bomba da fucile
reticolato (di carta
topografica)
azimut rete
convergenza rete
rete topografica
riferimento cartografico
quadratura della carta
topografica
rete topografica militare
terreno, terra, fuoco
punto zero reale
punto zero desiderato
piazza d'armi, campo
d'addestramento
azione terrestre
ufficiale di collegamento
dell'Esercito
ordine di battaglia
terrestre (tempo di pace)
ordine di battaglia
terrestre (tempo di
guerra)
punto zero (di una
esplosione nucleare)
rilievo
tratto vitale
gruppo
gruppo indicatore di
indirizzi
gruppo di Armate

G

battle g.
date/time **g.** (DTG)
group of mutual
supporting strongpoints

tactical control **g.**
tactical **g.**
(tactical) battalion **g.**

(tactical) company **g.**

guard
advance **g.**
flank **g.**

home **g.**
rear **g.**
to mount **g.**
to relieve **g.**

guardroom,
guerilla (guerrilla)
counter **g.**
guidance,

logistic policy and **g.**
guide,
to **guide,**

guided missile

gruppo di combattimento
gruppo data orario

gruppo di capisaldi
cooperanti
gruppo di controllo tattico
gruppo tattico
gruppo tattico a livello
battaglione
gruppo tattico a livello
compagnia
guardia, vigilanza
avanguardia
elementi di sicurezza sui
fianchi
forze territoriali
retroguardia
montare di guardia
dare il cambio alla
guardia
corpo di guardia
guerriglia, guerrigliere
controguerriglia
guida, norma, direttiva,
governo
norme logistiche
guide, scorta
guidare, dirigere,
governare
missile teleguidato

gully,
ice **g.**
scree **g.**
gun,

g. anti-aircraft
g. anti-tank
g. anti-tank selfpropelled
g. anti-tank towed
g. artificer
g.-barrel
g. boat
g.-carriage
g.'s crew
g.-fire

g. position
heavy **g.**
light **g.**
machine-**g.**
recoilless **g.**

self-propelled **g.**
sub-machine **g.**

gunner,
machine **g.**
gunnery,

canalone (colatoio)
canalone di ghiaccio
canalone di detriti
arma da fuoco, bocca da
fuoco, cannone, pezzo
d'artiglieria
cannone c/a
cannone c/c
cannone c/c smv
cannone c/c trainato
artificiere
canna (d'arma da fuoco)
cannoniera (nave)
affusto di cannone
serventi al pezzo
sparo, colpo di cannone,
cannoneggiamento
linea pezzi
cannone pesante
cannone leggero
mitragliatrice
arma (cannone) senza
rinculo
cannone semovente
mitra
artigliere
mitragliere
artiglieria, balistica, tiri
d'artiglieria

H

hemorrhage,
hemostatic,
half,
h.-life

h. thickness

halt,
scheduled **h.**
temporary **h.**
to **hamper,**
handie-talkie,
handling,

message **h.**
PW **h.**
Hand-to-hand,
h. to h. fighting,
hangar,
to **harass,**
harrassing fire
harbour,
artificial **h.**
unloading **h.**
harmful,
haversack,
hazard,

emorragia
emostatic
metà, mezzo
tempo di dimezzamento
(radioattività)
spessore di
dimezzamento
(radioattività)
fermata, arresto, sosta
fermata programmata
sosta temporanea
impedire, ostacolare
radio portatile
maneggio, trattamento,
modi di impiegare, modo
di trattare
trattamento dei messaggi
trattamento dei prigionieri
corpo a corpo
lotta corpo a corpo
aviorimessa
disturbare, molestare
tiro di disturbo
porto
porto artificiale
porto di scarico
dannoso nocivo
tasca pane
azzardo

radiological **h.**
head, testa
air **h.**
beach **h.**

bridge **h.**
rail **h.**
war **h.**
nuclear war **h.**
headlight,

anti-dazzle **h.s.**
headquarters,

battalion **h.**
combined **h.**

company **h.**
h. and service company

higher **h.**
interallied **h.**
joint **h.**

mounting **h.**

regiment **h.**
subordinate **h.**

azzardo radiologico

testa d'aviosbarco
testa di sbarco (operaz.
anfibia)
testa di ponte
testa di ponte ferroviario
testata esplosiva
testata term nucleare
faro, proiettore, luce
frontale (autom.)
fari anabbaglianti
comando, quartiere
generale
comando di battaglione
comando combinato (di
più nazioni alleate)
comando di compagnia
compagnia comando e
servizi
comando superiore
comando interalleato
comando interforze
(misto)
comando superiore di
appartenenza di una
formazione
comando di regimento
comando inferiore

heater,
hedgehog,

height,
drop h.

h. of burst (HOB)

fallout safety h. (HOB fs)

safe burst h.

spot h.

heliborne,

h. operations

h. troops

helicopter, (Heli)

assault h.

cargo h.

h. transport operations

reconnaissance (recce) h.

utility h.

heliograph,

helipad,

h. day marker

heliport,

helm,

helmet,

hero,

heroism,

to hide,

hierarchy,

highway,

hindsight,

hinterland,

to hit,

holst,

h. capacity

holding,

h. attack

riscaldatore

posizione fortificata

(a riccio), ostacolo

antisbarco

altezza, quota

quota di lancio

altezza di scoppio

nucleare

altezza di scoppio di

sicurezza da ricaduta

radioattiva

altezza di scoppio di

sicurezza

quota (UK)

eliportato

elisbarco

truppe eliportate

elicottero

elicottero d'assalto

elicottero da trasporto

elitransporto

elicottero da ricognizione

elicottero di impiego vario

eliografo

elicampo, zona di

atterraggio elicotteri

segnaletica di zona

atterraggio elicotteri

eliporto

timone

elmetto

eroe

eroismo, atto eroico

nascondere

gerarchia

strada di grande

comunicazione

tacca di mira

entroterra, retrovia

colpire

sollevamento,

montacarichi

capacità di sollevamento

tenuta, fissaggio

azione di fissaggio

holds,

to hold-up,

to h. a position

to h. an advance

hole,

blast, h.

bomb h.

fox h.

homeguard,

honour,

military h. s.

soldierly h.

the h. s. of war

hook,

spring-h.

hospital,

field h.

hospitalization,

host,

h. nation

hostile,

hour,

"H"-h.

hovercraft,

howitzer,

heavy h.

light h.

medium h.

hut,

hydrogen,

heavy h.

h. bomb

hydrographer,

hydrographic(al),

hydrography,

hydroscopic,

hygiene,

h. and prophylaxis

personal h.

appigli (sulla roccia)

tenere, fermare,

contenere

mantenere una posizione

contenere l'avanzata

nemica

buca, fornello

fornello da mina

cratere

buca, appostamento,

riparo

truppe territoriali

onore

onori militari

onore di soldato (militare)

onore delle armi

gancio

moschettone

ospedale

ospedale da campo

ospedalizzazione,

ricovero in ospedale

ospite

nazione ospitante

nemico, ostile

ora

ora "H"

veicolo a cuscino d'aria

obice

obice pesante (240 mm.)

obice leggero (105 mm)

obice medio (155 mm.)

pesante campale

rifugio

idrogeno

idrogeno pesante

bomba all'idrogeno

idrografo

idrografico

idrografia

idroscopico

igiene

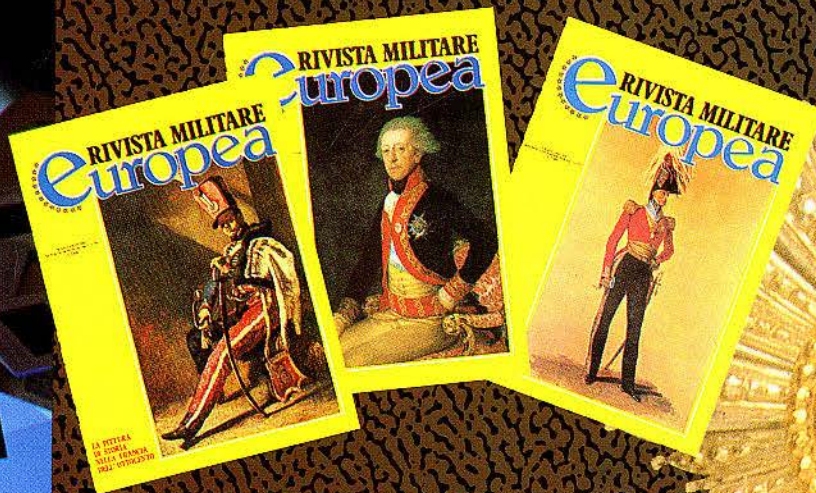
igiene e profilassi

igiene personale



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ACHILLE RAGAZZONI

UN GARIBALDINO
DIMENTICATOCAMILLO ZANCANI DA EGNA
(1820 - 1888)

PREFAZIONE DI QUIRINO REZZI

CENTRO DI STUDI ATESENI
BOLZANO

Achille Ragazzoni: "Un garibaldino dimenticato: Camillo Zancani Da Egna (1820-1888)", "A forgotten soldier in Garibaldi's army: Camillo Zancani Da Egna (1820-1888)", Centre of Atesine Studies, Bolzano, 1988, 78 pages, L. 19,000

One hundred years have passed since Camillo Zancani died, but — according to the Author — his memory still bothers someone.

Zancani, who was awarded two Silver Medals for Military Valour and the Cross of the Military Order of Savoia, is not simply one of the soldiers in Garibaldi's army, but is the only person living in the region of the upper Adige, who took part in Garibaldi's Thousand expedition, in the first, second and third Independence War, as well as in the exploit in Aspromonte and in the Mazzini conspiracy of 1863-1864.

A man who took part in all Garibaldi's campaigns from 1848 to 1866, who devoted his life to the Unity of Italy, darkens the artificial image of an always and merely German Tyrol.

This is a page of history showing one of those characters who bound the Upper Adige region to the history of the Italian Risorgimento: beside Zancani it is necessary to mention also other soldiers of Garibaldi's army: Pietro Baroni of Bronzolo and Ottavio Bonamini of Salorno and the worker Augusto Benoni of Laives, who was one of the defenders of Venice.

Also the mother of the heroic Bronzetti brothers was from the Upper Adige

region, precisely from the Upper Adige region, precisely from Bronzolo, and by choice also Oreste Baratieri, who was expelled from the Ginnasio of Merano and died in Vipiteno.

The Author is deeply convinced that the mutual respect and the correct knowledge of the many national traditions is fundamental to build the Europe of the future in a climate of honest and peaceful living together.

TOMMASO DE RUSSIS

MONUMENTI
AI
CADUTI

VOL. I

ED. DI PADOVA
1988

Tommaso De Russis: "Monumenti ai Caduti", ("War Memorials"), De Russis ed., Polignano a Mare (BA), 1988, 204 pages.

Published in a very short run, the first volume of "War Memorials" in postcards of that time, came out on May 7th, 1988, on the occasion of the formal unveiling of the Sea War Memorial of Polignano a Mare.

It is a collection of picture postcards representing all the Italian regions.

Such a collection was started by the author's father in 1930. He did it with great passion and utilized all his direct knowledge, since he was a fighting sailor and much-decorated in the Italian-Turkish war (1911-1912) and in World War I (1915-1918). Later, this collection was enriched by the author with new material and exhibited in many Italian towns with great success.

Ferdinando Schettino

Sun Tzu

L'ARTE
DELLA
GUERRAGUIDA
EDITORI

Sun Tzu: «L'arte della guerra», (The Art of War) with an introduction by A. Corneli, published by Guida Editori, Naples, 1988, 147 pages, Lire 20,000.

Sun Tzu is the Clausewitz of ancient China and is certainly one of the greatest scholars of strategy and one of the main theorists of war. He is often and, we believe, wrongly opposed to Clausewitz. In fact, it is said that Clausewitz is an upholder of direct strategy, of the frontal shock action of armed masses, believing more in the power of forces than in the ability and stratagems of commanders. Sun Tzu, instead, is considered the theorist of indirect strategy, of wit, manoeuvre and psychological actions which weaken the enemy and which may even give rise to victory without fighting. As stated by Liddel Hart, Clausewitz' severe critic though he had probably never read anything by him, the Prussian general was the Madhi of the massacres of the First World War, the one who had eliminated the creative intelligence of the military chief only to replace it with brutal strength. Sun Tzu on the one hand and Scipio the African on the other were, according to Liddel Hart, far superior to Clausewitz.

The former because he entended to achieve victory without running the risks and losses implied in battle. The latter because, by following a strategy of direct approach which consists in projecting the mass of the forces on the enemy's weak



point (attacking Hannibal in Spain and later in Africa and not in Italy where he was with his army), he obtained victory without the severe losses ensuing from every frontal battle.

In fact, Sun Tzu says some very interesting things. He describes a method of conflict based on psychological and diplomatic skirmishes, more than on true and proper combats. I referred to the conflicts of his time among the Chinese "Lords of War" who, basing their power on the army, could not risk its destruction in battle. Clausewitz lived in another period.

That of the national armies in which subjects had changed to citizens and had achieved the right-duty to bear arms.

The legitimacy of the political system no longer depended on the army, but on the citizens' consent. Compulsory conscription supplied masses of soldiers. Operations could become decisive and military strength could be turned into political results. The battle thus became the focal centre of the conflict.

Clausewitz, however, does not limit the conflict to the sole military component,

even if for him strategy is the art of employing the latter to achieve political objectives and he thus discovers political strategy, the "military reason" of the "reason of State". Military strength is subject to policy and is moulded by it. It not only has material aspects, but moral and intellectual ones as well. It has however, its own internal grammar. For Clausewitz too, the manoeuvre and the destruction of the enemy's moral are essential.

The head of state as well as the field commander will always try the most inexpensive way to reach success and this consists in the moral and psychological collapse of the enemy.

According to circumstances, this may be obtained directly, that is by materially destroying its forces or indirectly by striking the socio-systemic ties that keep them together.

We believe that the opposition between Sun Tzu and Clausewitz is artificial. Sun Tzu is both Machiavelli and Clausewitz. Political reason and military reason are strictly integrated.

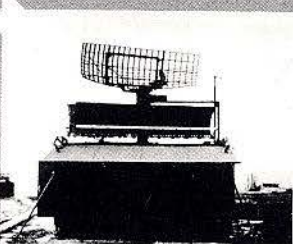
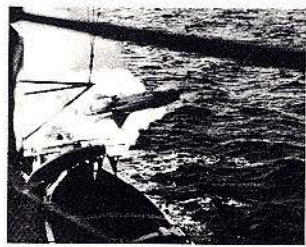
The latter is virtually absorbed by the

first, without self-sufficiency, not only as regards logic, but partly also as regards grammar. As already said it is a question of priority arising from the conditions of the period in which the Chinese scholar lived and which — here we agree with the editor — are in many ways similar to the times we are now experiencing.

There are no set rules however, but only explanations and descriptions.

Here lies the importance of Sun Tzu's teachings and the wisdom and usefulness in facing the problems of the security and conflicts of our time. A new edition of this work is especially useful in this period of deep changes and importance for nuclear weapons. Alessandro Corneli's comments to the book are very interesting, penetrating and appropriate. In brief, it is a work which we believe deserves to be widely circulated and studied by the Italian Armed Forces.

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patrol aircraft; Standard Pod contained search radars for fixed wing aircraft to be employed in conjunction with ASM; Integrated search and tracking radars for A/A defence to be employed both on specialized trucks (OTOMATIC) or on semi-mobile/fix station for point defence; applied research aimed toward millimetric waves (up to 100 GHz) in active and passive sensors (radiometer); Duct analysis and electromagnetic propagation forecast.

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